

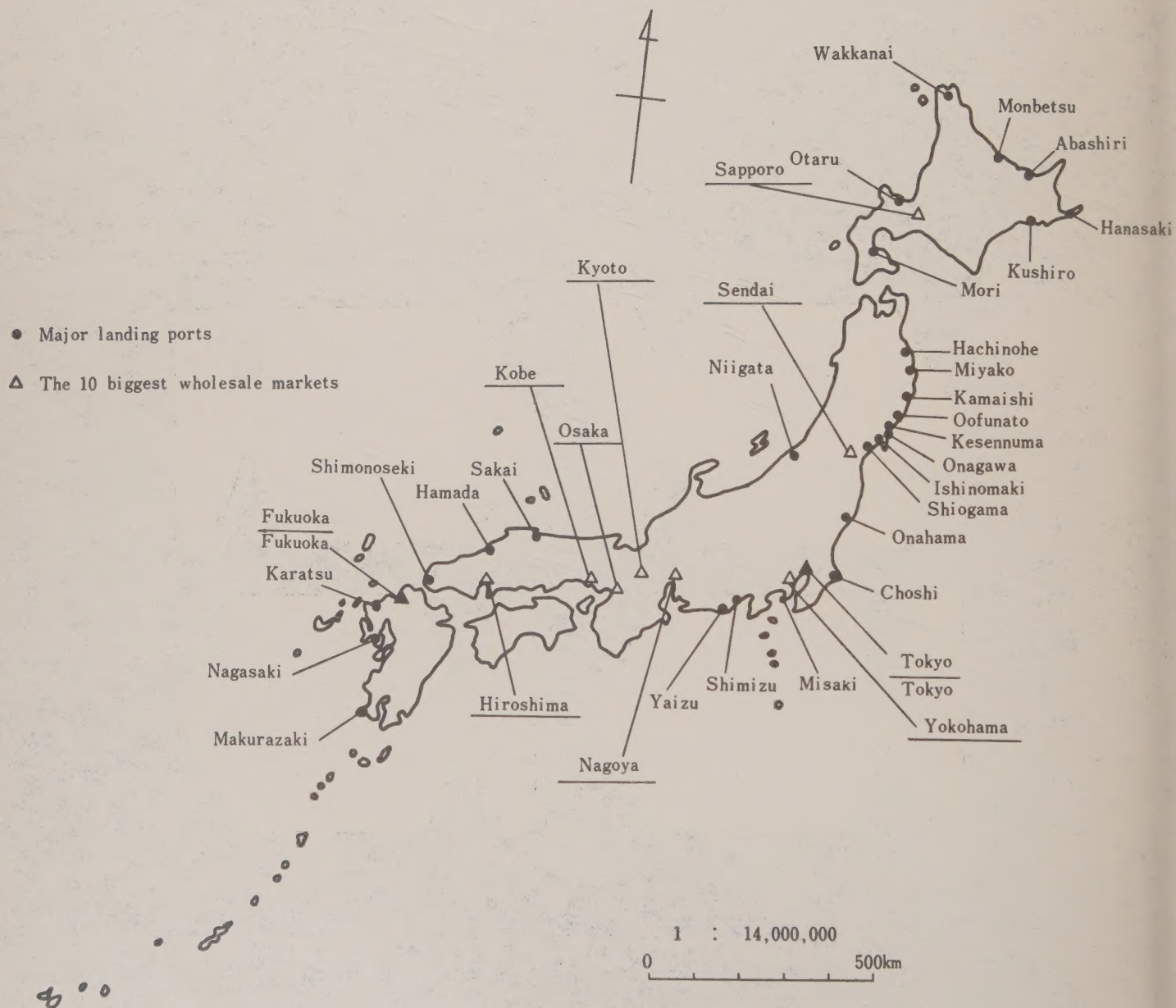
FISHERIES STATISTICS OF JAPAN 1980



STATISTICS AND INFORMATION DEPARTMENT
MINISTRY OF AGRICULTURE, FORESTRY AND
FISHERIES

GOVERNMENT OF JAPAN

MAJOR LANDING PORTS AND THE 10 BIGGEST WHOLESALE MARKETS IN JAPAN



FOREWORD

FISHERIES STATISTICS OF JAPAN

1980

STATISTICS AND INFORMATION DEPARTMENT
MINISTRY OF AGRICULTURE, FORESTRY AND
FISHERIES

GOVERNMENT OF JAPAN

FOREWORD

The bulletin "Fisheries Statistics of Japan" has been published year-
ly since 1953 to introduce overseas readers the outline of the cur-
rent fishery situation of Japan. It contains major statistical tables
on fishery production, structure, marketing and economy.

Japan traditionally depends much more on fish for the maintenance of the
supply of animal proteins to the people, and it is generally recognized
that this situation will not be changed largely in the future. The

total catch of Japan has been maintained the level over the years
except for a few years since 1951, and has shown a tendency to increase
such as several circumstances as the restriction of fishing effort on over-
fishing, the "100 mile fishing zone" and the increased cost
of fishing operation because of the high price of fuel. On the other
hand, the effective utilization of fishery resources is the main
around Japan is to be improved. The government and development
under way by the government.

We hope this bulletin would benefit the readers in understanding the
situation of the current Japanese fishery. Lastly, we would much
appreciate all readers would provide us any suggestions to improve
this bulletin.

March, 1980

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END

Director,
Statistics and Information Department
Ministry of Agriculture, Forestry and
Fishery
Government of Japan

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1 Sources of statistics

Table No. I-1 ~ 8, II-1, 2	Statistics and Information Department
III-1 ~ 4, 9, 10	Ministry of Agriculture, Forestry and Fisheries
IV-1, 2	Fisheries Agency
Table No. II-3, 4	Ministry of Agriculture, Forestry and Fisheries
Table No. III-5 ~ 7	Bureau of Customs, Ministry of Finance
Table No. III-8	Minister's Secretariat
	Ministry of Agriculture, Forestry and Fisheries
Table No. III-9, 10	Bureau of Statistics
	Office of the Prime Minister
Reference Table 1, 2	F. A. O.

2 Period of inquisition

As a principle, the statistics in this bulletin are inquired by the calendar year but the figures of the whaling in the Antarctic Ocean are given for the "Whaling year" (from Nov. 1978 to Mar. 1979)

3 Symbols

The following symbols are used in this publication:

- [0] means "Less than the unit amount" /
- [---] means "Unknown or not available"
- [-] means "No record"
- [Δ] means "Minus"

FISHERY PRODUCTION

1971-1972

STATISTICAL CHARTS

1. Total Catch by Type of Fishery, 1971-1972



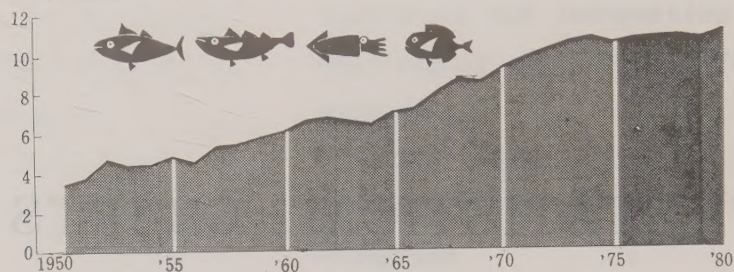
2. Total Catch by Type of Fishery, 1971-1972

Type of Fishery	1971 (Thousands of metric tons)	1972 (Thousands of metric tons)
Marine Fish	65	85
Freshwater Fish	25	35
Shellfish	10	15
Other	5	5
Total	105	140

I. FISHERY PRODUCTION

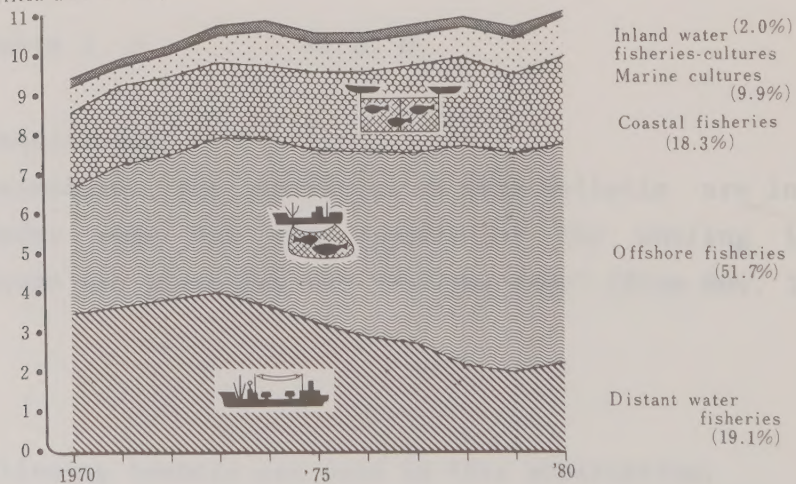
1. Annual Trend of Total Catch, 1950~1980

(Million metric tons)

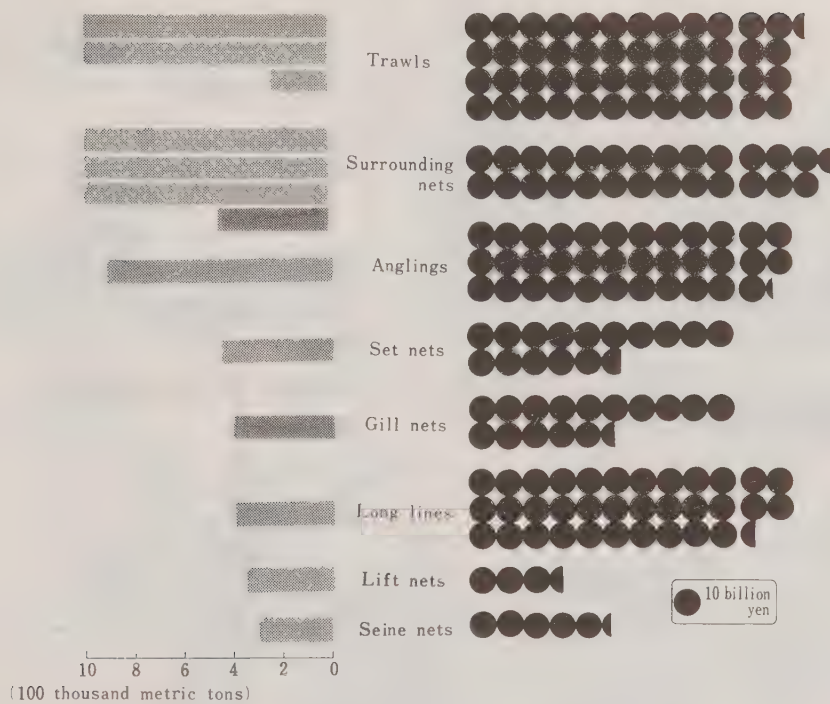


2. Total Catch by Type of Fisheries, 1970~1980

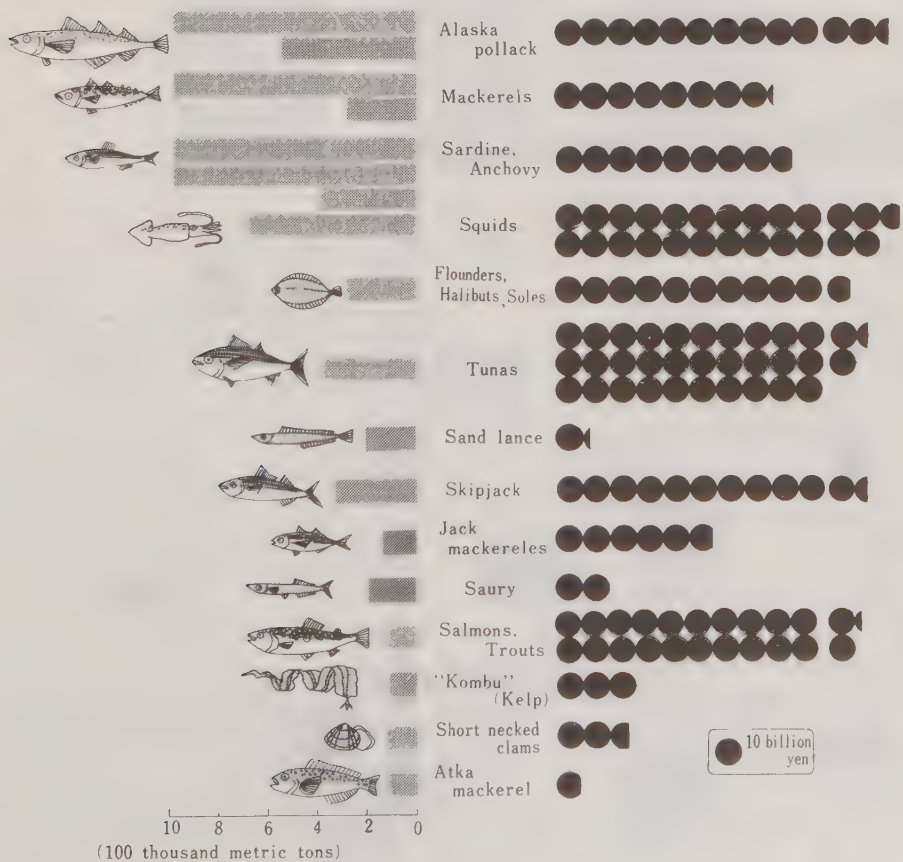
(Million metric tons)



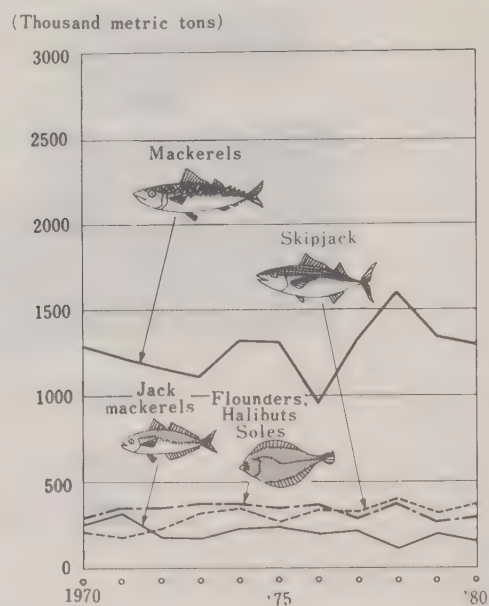
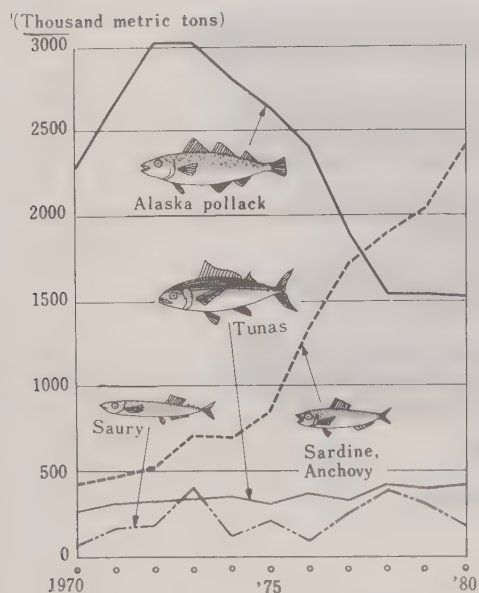
3 Catch by Type of Fishery, 1980



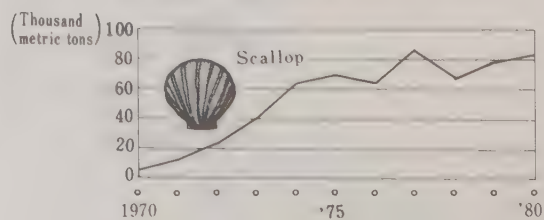
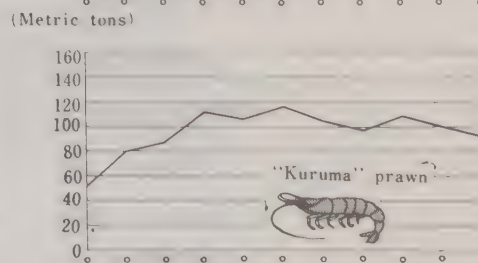
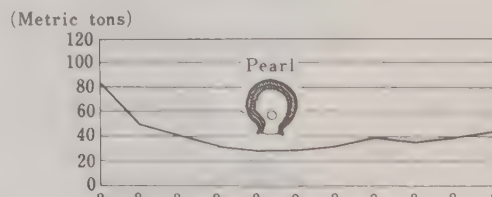
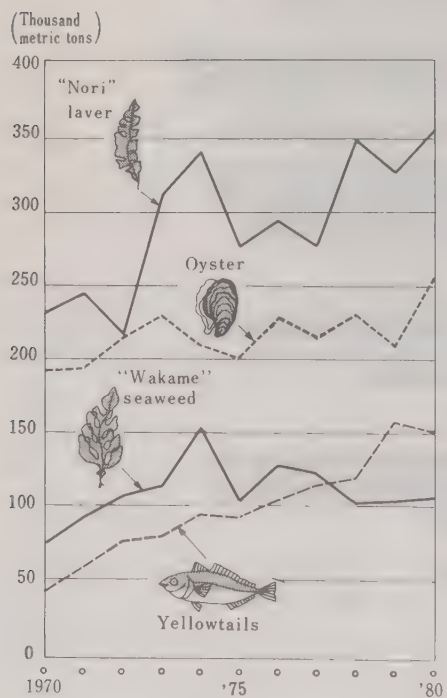
4 Catch by Major Fish, 1980



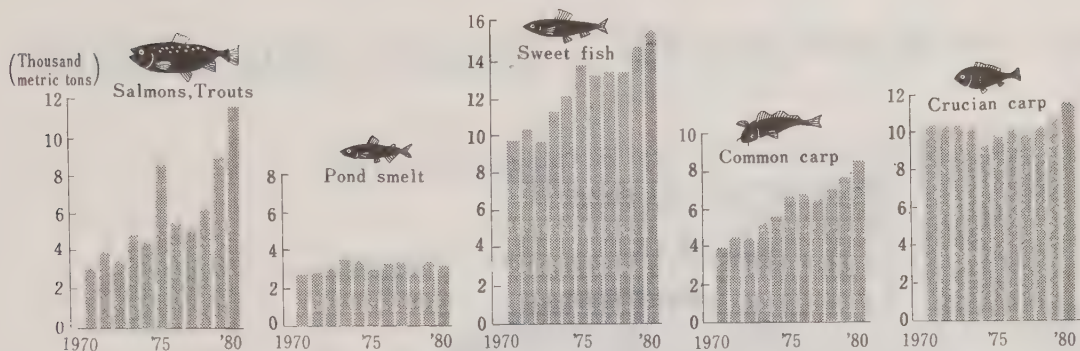
5 Catch by Major Fish, 1970~1980



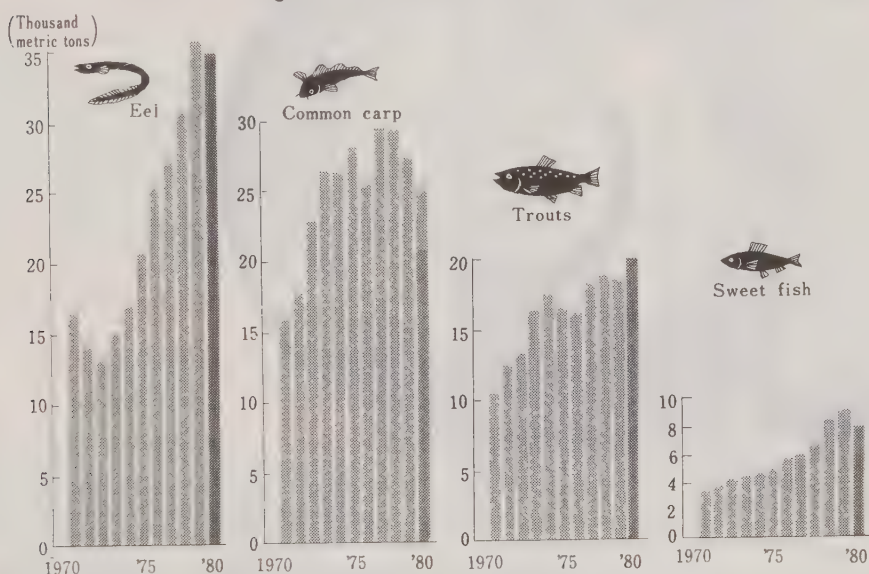
6 Yield of Marine Cultures, 1970~1980



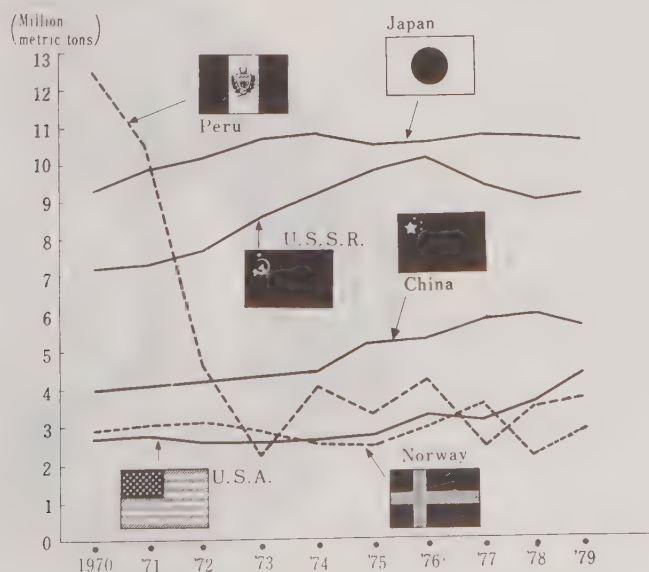
7 Catch of Major Inland Water Fish, 1970~1980



8 Yield of Major Inland Water Culture Fish, 1970~1980

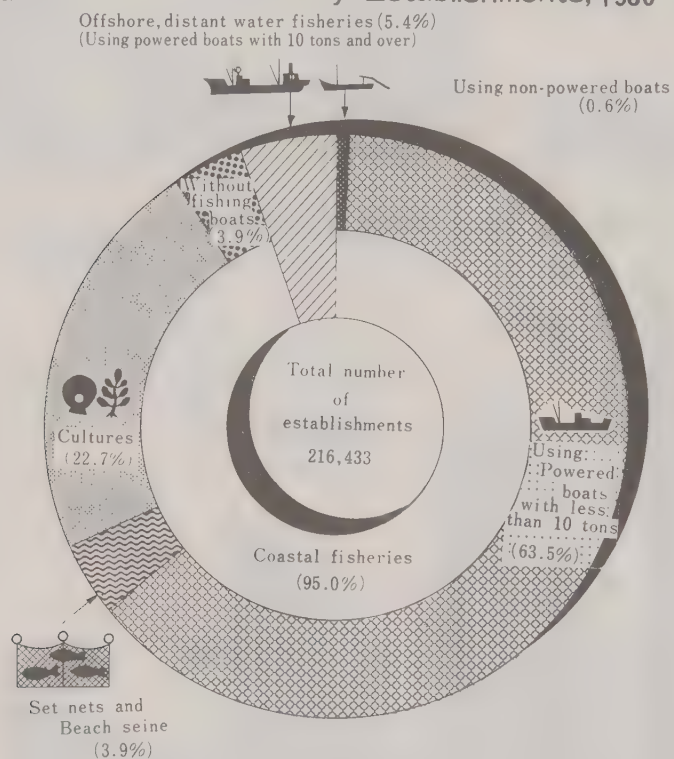


9 Catch of the World by Countries, 1970~1979

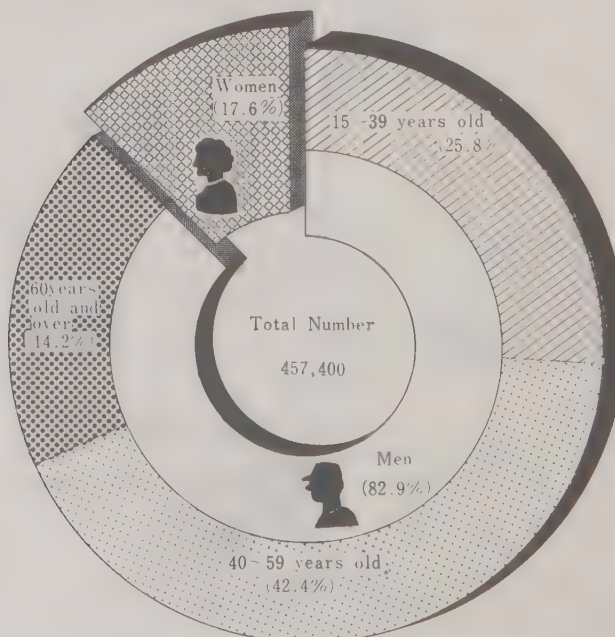


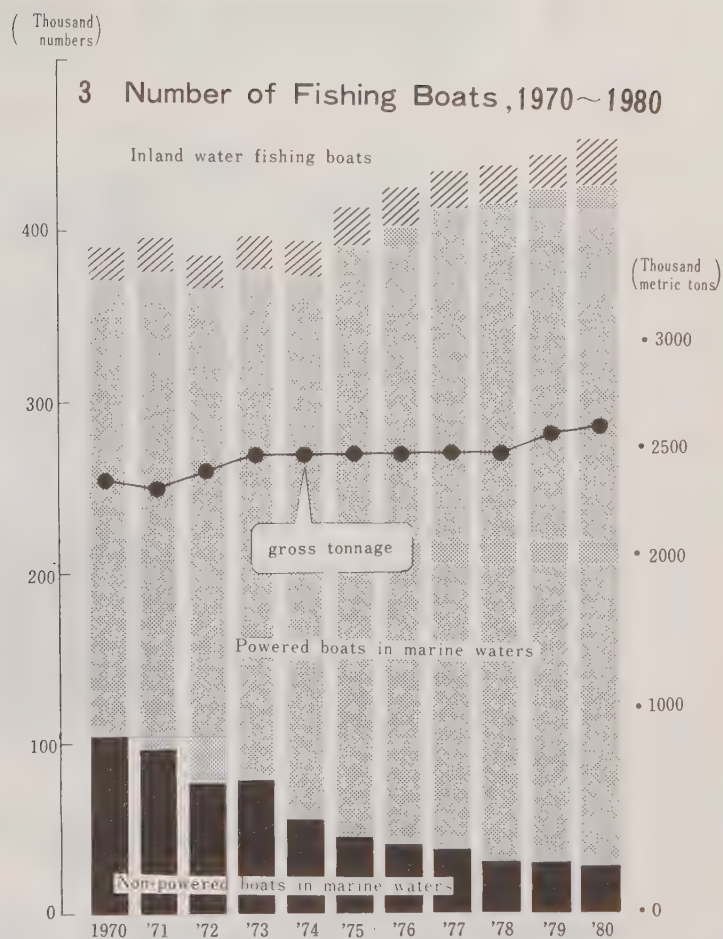
II STRUCTURE OF FISHERY PRODUCTION

1 Number of Marine Fishery Establishments, 1980

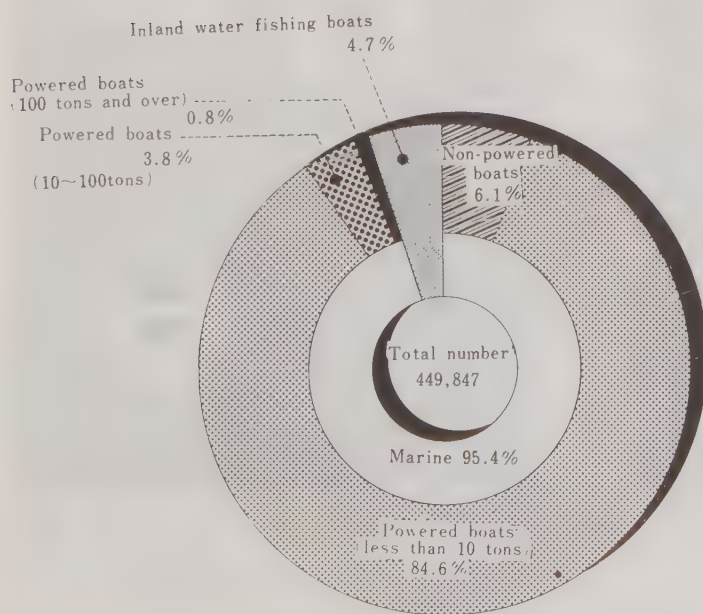


2 Number of Marine Fishery Workers, 1980



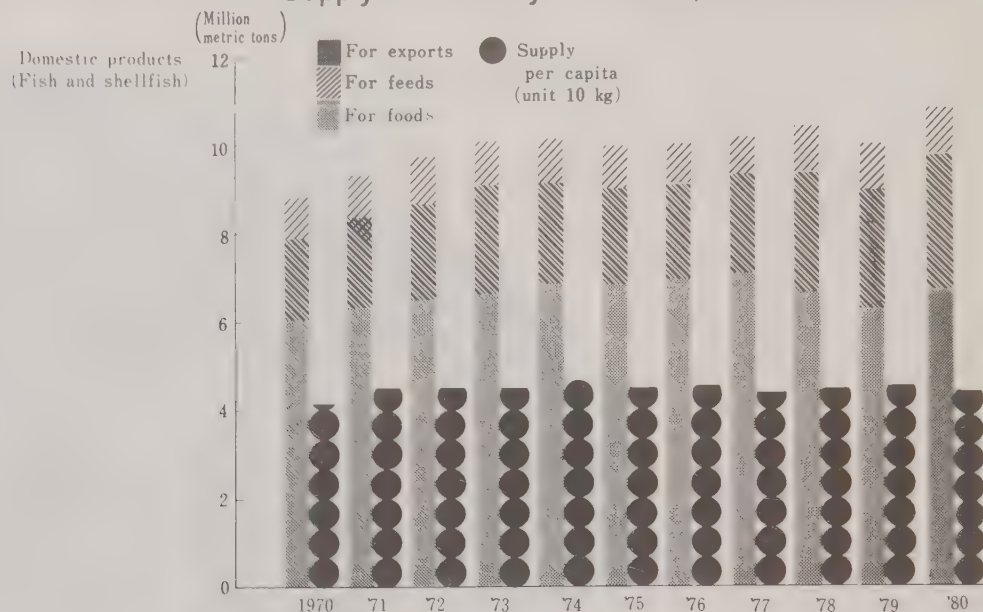


4 Number of Fishing Boats, 1980



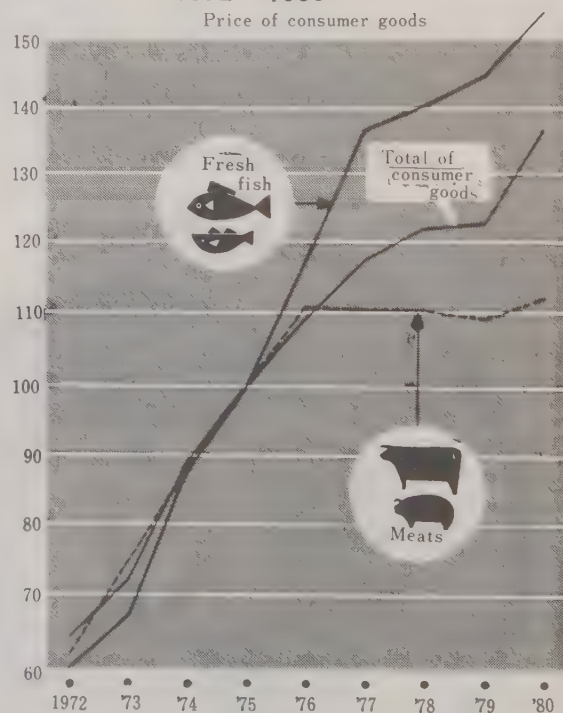
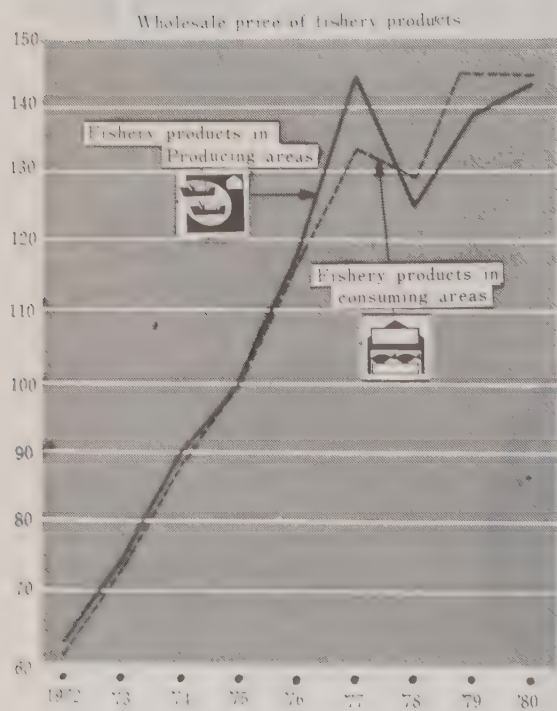
III MARKETING OF FISHERY PRODUCTS

1 Supply of Fishery Products, 1970~1980

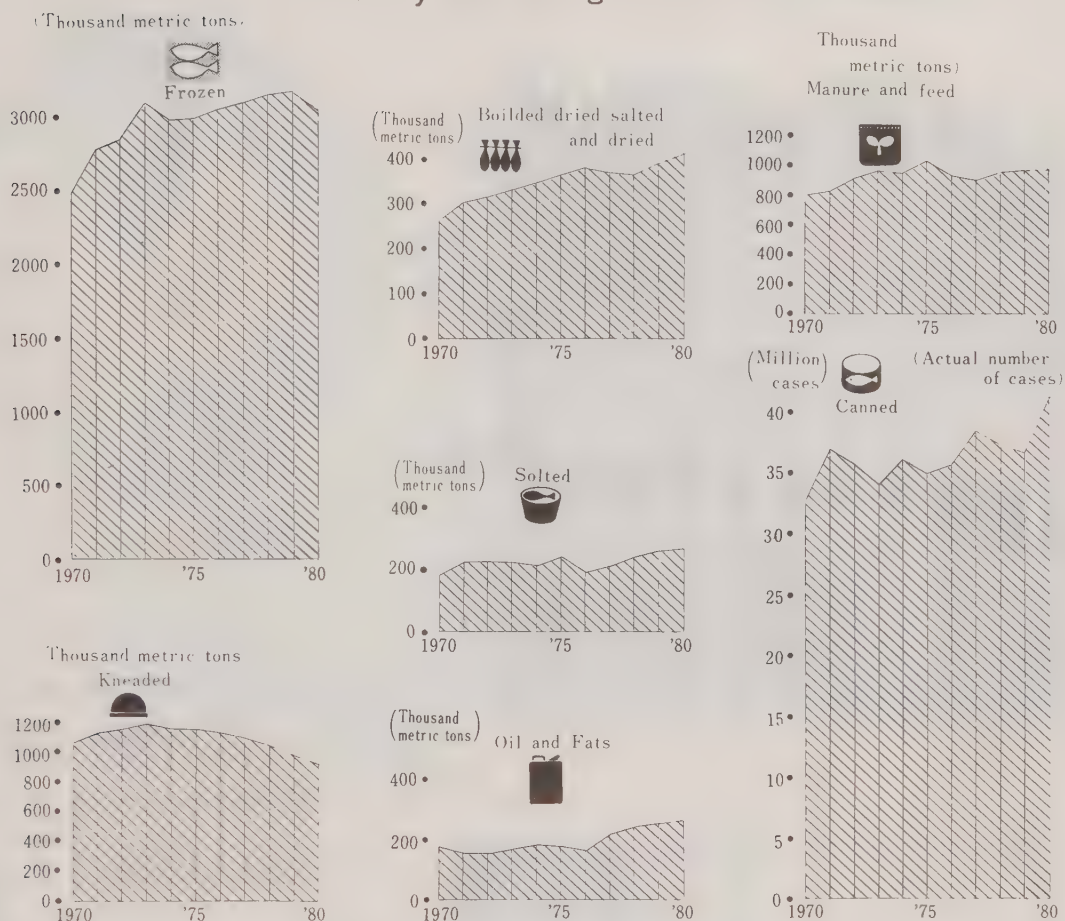


2 Price Index of Fishery Products (1975=100)

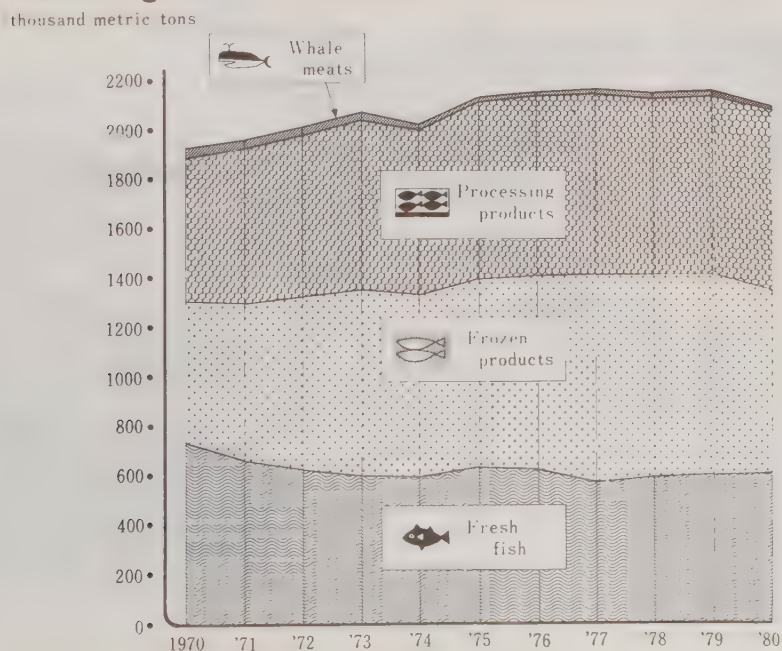
1972~1980



3 Fishery Processing Products, 1970~1980

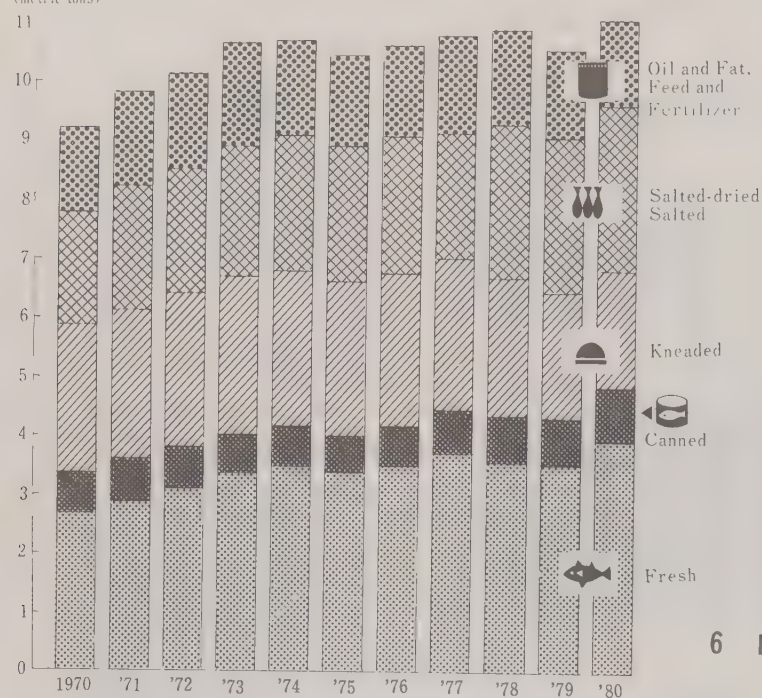


4 Volume Transacted by Group of Commodity in Six Large Central Wholesale Markets, 1970~1980



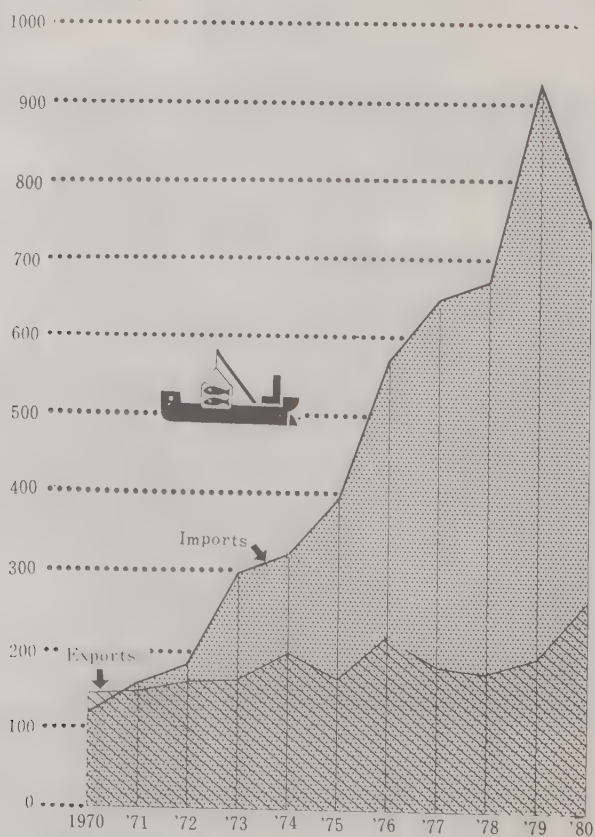
5 Disposition of Fishery Products, 1970~1980

(Million
metric tons)

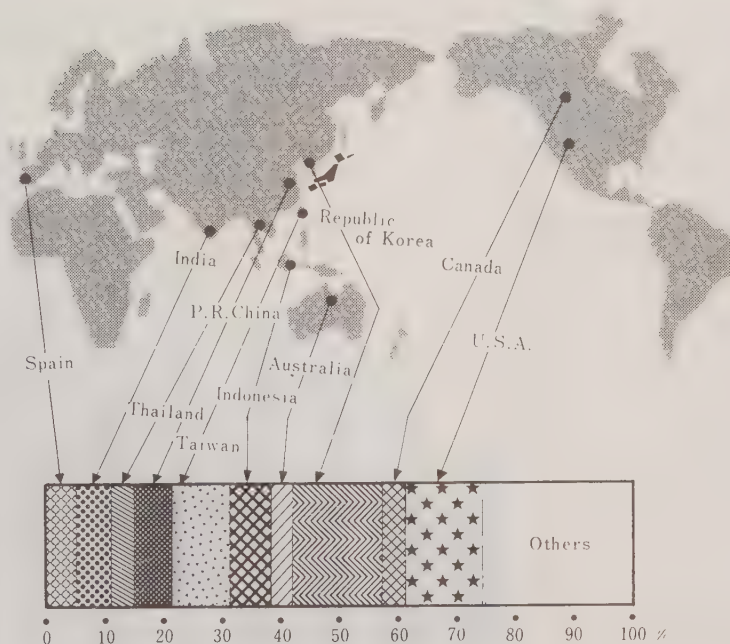
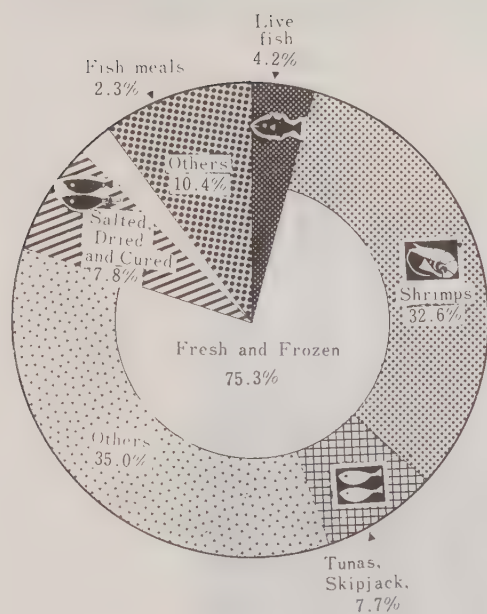


6 Exports and Imports of Fishery Products, 1970~1980

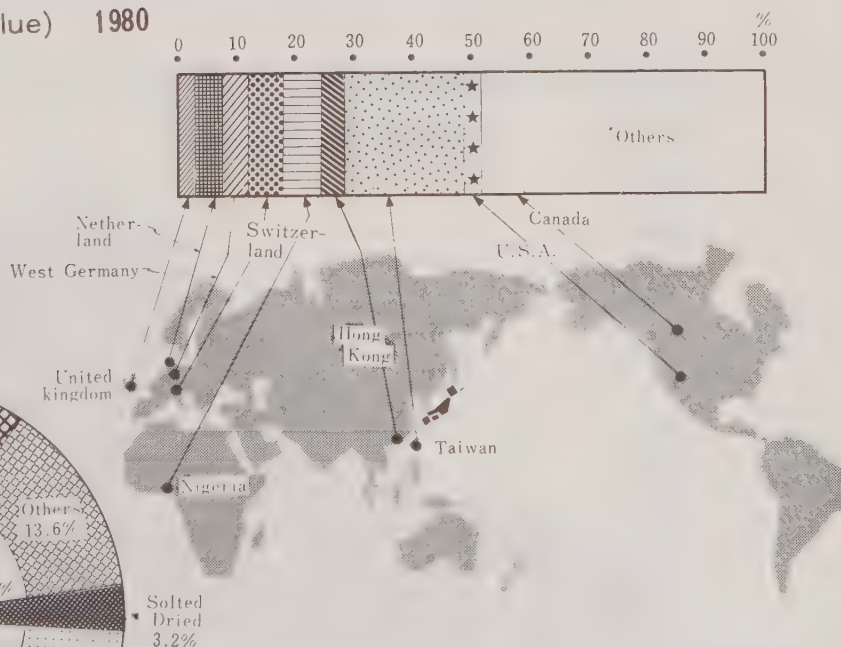
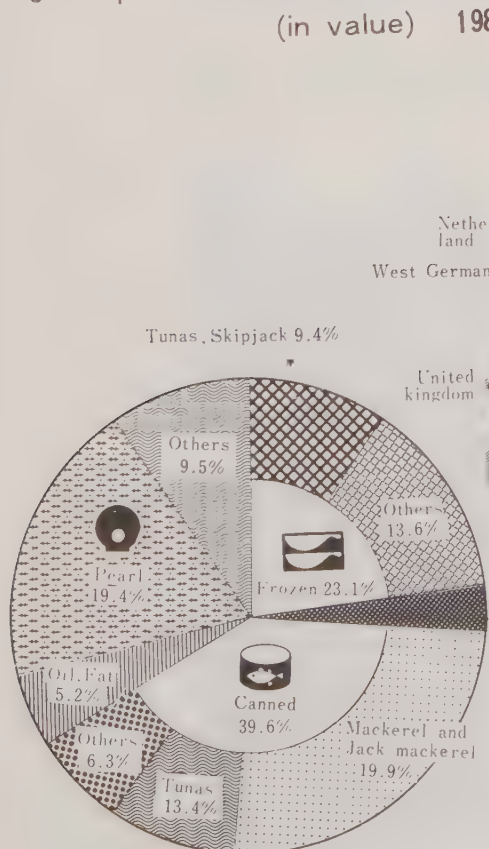
(100 billion yen)



7 Imports of Fishery Products, 1980 (in value)

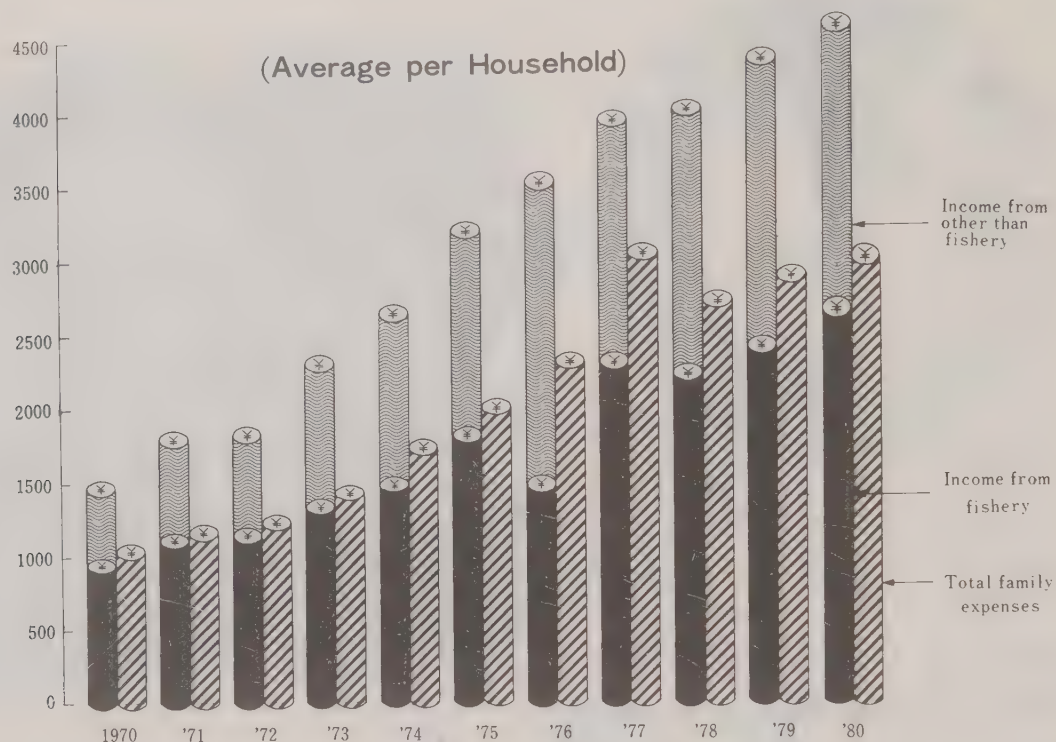


8 Exports of Fishery Products, 1980 (in value)

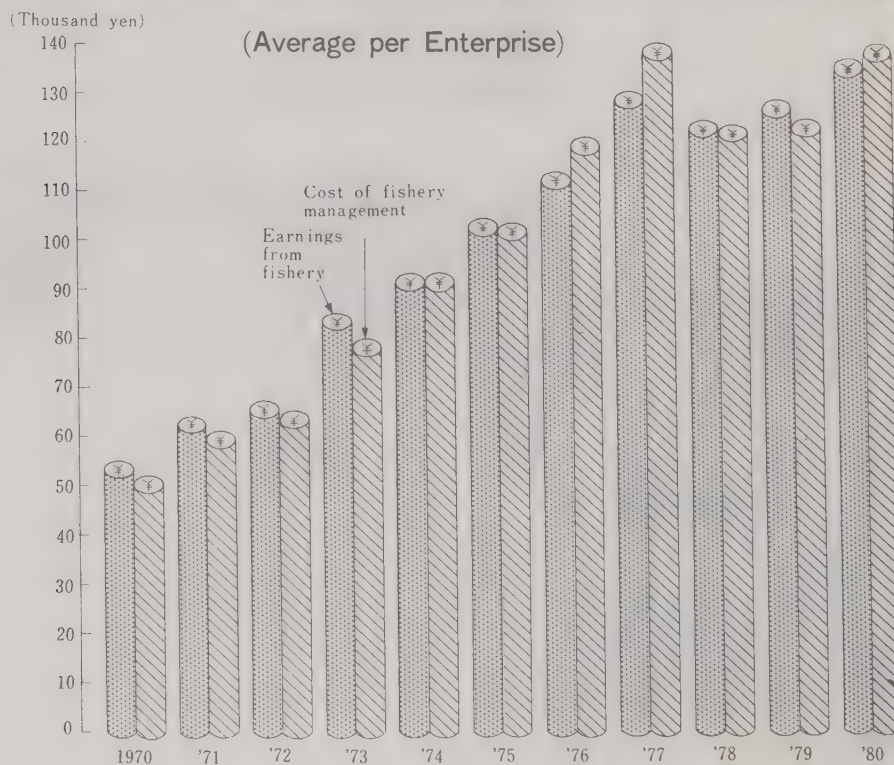


IV. ECONOMY OF FISHERY ESTABLISHMENTS

(Thousand yen) 1. Economy of Fishery Household, 1970~1980



2. Economy of Middle and Small Size Fishery Enterprise, 1970~1980



STATISTICAL TABLES

I FISHERY PRODUCTION

I - 1 SUMMARY OF CATCH BY FISHERY
SECTOR, 1950~1980Unit { Quantity: Thousand metric tons
Value : Hundred million yen

Year	Total		Marine Fisheries		Marine Cultures		Inland Water Fisheries		Inland Water Cultures		Whalings	
	Quantity	Value	Quantity	Value	Quantity	Value	Quantity	Value	Quantity	Value	Numbers	Value
1950	3,373	---	3,255	---	48	---	63	---	5	---	5,332	---
1951	3,930	---	3,774	---	88	---	60	---	6	---	6,335	---
1952	4,823	---	4,646	---	113	---	53	---	9	---	7,816	---
1953	4,598	---	4,387	---	144	---	57	---	8	---	6,631	---
1954	4,541	---	4,304	---	145	---	82	---	9	---	9,591	---
1955	4,907	---	4,658	---	154	---	82	---	11	---	11,866	---
1956	4,772	2,310	4,488	2,012	180	206	90	62	13	30	14,124	160
1957	5,407	2,582	5,067	2,303	244	174	81	73	14	31	15,439	213
1958	5,506	2,569	5,198	2,257	214	205	78	70	15	37	19,922	196
1959	5,884	2,877	5,568	2,535	225	236	75	69	15	36	20,527	221
1960	6,192	3,448	5,817	2,983	284	338	74	80	15	47	19,649	234
1961	6,710	3,952	6,287	3,340	322	455	81	93	18	64	20,848	267
1962	6,864	4,266	6,397	3,567	362	538	84	94	20	68	22,240	269
1963	6,698	4,830	6,200	3,988	389	650	84	98	23	94	22,373	309
1964	6,350	4,976	5,868	4,039	362	724	89	102	29	111	24,410	323
1965	6,908	5,558	6,382	4,516	380	816	113	101	33	126	26,986	376
1966	7,103	6,260	6,558	5,005	405	974	103	118	36	164	22,784	290
1967	7,851	7,026	7,241	5,677	470	1,074	97	109	42	166	21,088	252
1968	8,670	7,448	7,993	6,097	522	1,010	103	119	52	221	21,586	237
1969	8,613	8,488	7,976	6,928	473	1,130	112	144	52	285	17,409	221
1970	9,315	9,692	8,598	7,852	549	1,353	119	170	48	317	16,887	272
1971	9,909	10,894	9,149	8,957	609	1,374	101	214	50	349	16,419	314
1972	10,213	11,796	9,400	9,417	648	1,708	109	231	56	441	17,590	278
1973	10,763	14,641	9,793	11,564	791	2,252	114	299	64	528	14,012	273
1974	10,808	17,084	9,749	13,789	880	2,325	112	348	67	622	14,277	327
1975	10,545	18,870	9,573	15,204	773	2,536	127	417	72	713	13,427	337
1976	10,656	21,862	9,605	17,702	850	2,933	124	415	77	811	9,632	216
1977	10,757	25,451	9,688	20,513	861	3,522	126	486	82	930	9,299	206
1978	10,828	24,511	9,683	18,914	917	4,013	138	508	90	1,076	5,924	124
1979	10,587	26,473	9,477	20,559	879	4,222	136	527	95	1,164	4,918	107
1980	11,122	27,838	9,909	21,336	992	4,687	128	578	94	1,110	5,191	126

I - 2 SUMMARY OF CATCH BY SPECIES GROUP, 1950~1980

Unit: Thousand metric tons

Year	Total	Marine Waters					Inland Waters				
		Fishes	Molluscs	Crus- taceans	Aquatic plants	Others	Fishes	Molluscs	Crus- taceans	Aquatic plants	Others
1950	3,373	2,210	760	49	257	28	32	12	1	23	1
1951	3,930	2,572	922	56	290	22	30	12	1	23	2
1952	4,823	3,268	1,033	72	361	27	35	13	1	12	1
1953	4,598	3,253	889	70	292	27	37	15	1	12	2
1954	4,541	3,239	786	99	287	38	44	14	2	31	1
1955	4,907	3,541	802	106	310	53	52	14	3	25	1
1956	4,772	3,441	774	95	304	52	60	16	3	24	3
1957	5,407	3,877	894	108	402	27	64	24	5	2	4
1958	5,506	4,017	893	119	339	42	62	26	3	1	4
1959	5,884	4,267	1,027	119	337	44	59	26	1	1	4
1969	6,192	4,463	1,078	126	386	51	60	25	1	1	3
1961	6,710	5,015	985	138	425	49	66	28	2	1	3
1962	6,864	4,911	1,158	149	501	41	69	30	2	1	3
1963	6,698	4,653	1,303	159	425	51	72	33	1	1	2
1964	6,350	4,745	925	153	361	48	80	35	1	0	2
1965	6,908	5,093	1,082	132	406	52	86	56	1	0	2
1966	7,103	5,232	1,097	142	436	57	86	50	1	0	2
1967	7,851	5,742	1,225	149	534	60	92	42	2	0	2
1968	8,670	6,340	1,430	186	503	57	104	44	2	1	4
1969	8,613	6,561	1,238	153	444	53	107	51	3	1	3
1970	9,315	7,289	1,132	146	521	59	103	58	3	1	3
1971	9,909	7,913	1,065	126	587	66	107	36	5	1	2
1972	10,213	8,075	1,217	137	559	59	110	46	5	1	2
1973	10,763	8,645	1,130	141	653	64	124	45	6	1	2
1974	10,808	8,543	1,129	170	601	85	126	44	6	1	3
1975	10,545	8,341	1,156	147	627	75	141	48	7	1	3
1976	10,656	8,378	1,196	129	665	87	142	48	5	1	5
1977	10,757	8,461	1,223	126	638	101	150	49	6	0	3
1978	10,828	8,433	1,232	141	638	155	161	52	9	0	6
1979	10,587	8,277	1,187	134	639	117	168	49	8	0	6
1980	11,122	8,582	1,372	130	695	120	165	43	6	1	8

I — 3 CATCH IN QUANTITY

	1976	1977	1978	1979	1980
Total 1)	10,655,903	10,756,794	10,828,289	10,590,423	11,121,846
Marine Fisheries	9,605,283	9,687,586	9,682,927	9,476,793	9,908,554
Fishes	8,269,154	8,335,958	8,300,940	8,106,566	8,412,014
Tunas, albacore	367,793	336,530	384,674	362,917	378,496
Marlins, swordfishes	45,155	41,548	46,627	43,357	44,120
Skipjack, frigate mackerel	351,248	322,703	384,621	346,518	376,739
Sharks, rays	51,471	58,747	50,048	51,976	54,170
Salmons, trouts	126,094	116,465	102,760	131,021	122,515
Herring	66,083	19,873	6,706	6,819	11,154
Sardine, round herring	1,118,168	1,464,655	1,687,953	1,866,495	2,236,160
Anchovy	216,664	244,933	152,428	134,577	150,606
Jack mackerel, scads	206,667	185,801	153,131	183,883	144,977
Mackerels	978,826	1,355,309	1,625,866	1,414,183	1,301,121
Saury	105,419	253,465	360,213	277,960	187,155
Yellowtails	42,763	26,915	37,414	44,970	42,009
Flounders, halibuts, soles	352,134	288,025	313,827	288,896	288,881
Cod	90,468	85,252	88,989	91,829	96,742
Alaska pollack	2,445,423	1,931,072	1,546,176	1,551,116	1,552,421
Atka mackerel	229,194	234,812	134,763	118,888	117,351
Rockfishes	89,810	61,926	43,972	50,374	43,180
Croakers	39,044	40,439	37,471	39,444	32,025
Hairtail	30,564	28,154	28,085	30,518	37,803
Sea breams	29,325	29,666	29,433	28,825	28,151
Spanish mackerel	15,204	40,621	7,500	6,140	7,045
Sand lance	224,390	137,340	99,078	110,484	201,226
Others	1,047,247	1,031,707	979,205	925,376	975,967
Crustaceans	127,593	125,049	140,035	132,930	128,064
Spiny lobster	1,028	971	1,000	1,064	1,065
"Kuruma" prawn	2,579	2,440	2,673	2,468	2,307
Other prawns, shrimps	57,415	50,019	56,003	49,129	47,133
King crab	1,258	287	130	270	56
Queen crab	22,028	21,070	22,902	23,476	21,314
Other crabs	43,285	50,262	57,327	56,523	56,189
Molluscs	904,553	927,082	932,378	938,307	1,070,601
Common squid	300,963	264,287	198,517	212,841	331,225
Other squids, cuttlefishes	189,725	248,378	321,231	315,990	355,386
Octopuses	66,873	67,913	65,441	51,986	46,105
Abalones	5,655	5,203	5,377	4,853	4,878
Short necked clams	135,573	155,506	153,767	132,641	127,386
Common scallop	30,270	43,502	59,664	79,734	83,134
"Mogai" clam	11,068	5,950	4,023	7,206	1,677
Other clams, shellfishes	164,426	136,343	124,359	133,056	120,810

BY SPECIES, 1976~1980

Unit: Metric tons

Species	1976	1977	1978	1979	1980
Echinodermata, etc.	76,639	92,127	145,638	111,434	113,907
Sea urchins	23,069	26,898	25,930	26,500	24,158
Sea cucumbers	10,579	9,793	10,143	9,381	8,970
Other marine animals	42,991	55,436	108,679	75,553	80,779
Marine mammals	1,768	1,429	1,899	1,062	1,283
Seaweeds	225,576	206,030	162,893	186,494	182,685
Kelps	159,162	132,989	108,911	131,546	124,816
"Wakame" seaweed	19,337	20,180	12,213	12,131	15,759
Agar-agar	10,081	11,634	11,374	11,177	9,861
Others	36,996	41,227	30,395	31,641	32,249
Marine Cultures	849,909	861,389	917,244	822,620	991,843
Yellowtails	101,619	114,866	121,728	154,872	149,311
Pearl	34	39	37	40	42
Oyster	226,286	212,786	232,069	205,509	261,323
Common scallop	64,909	83,180	67,723	43,614	10,399
"Nori" seaweed	291,050	279,031	350,471	325,686	357,672
"Wakame" seaweed	126,723	125,833	102,682	103,791	113,532
Others	39,288	45,654	42,534	49,108	69,564
Inland Water Fisheries	124,066	125,660	138,185	136,441	127,636
Salmons, trouts	5,750	5,593	6,151	8,652	11,536
Sweet fish	13,272	13,451	13,363	14,822	14,723
Common carp, crucian carp	17,073	17,076	18,127	18,804	18,545
Eel	2,040	2,102	2,068	1,923	1,936
Fresh water clams	48,214	49,358	52,423	51,075	43,093
Others	37,717	38,080	46,053	41,165	37,803
Inland Water Cultures	76,645	82,159	89,933	94,569	93,714
Trouts	16,837	17,617	19,029	18,464	19,972
Sweet fish	5,726	5,875	7,185	8,455	7,989
Common carp, crucian carp	27,243	30,302	30,452	28,715	26,196
Eel	26,251	27,630	32,106	36,781	36,618
Others	588	735	1,151	2,154	2,939
Whaling 2)	9,632	9,299	5,924	4,918	5,191
Blue whale	-	-	-	-	-
Fin whale	118	-	-	-	-
Humpback whale	-	-	-	-	-
Sei whale	1,977	1,737	516	227	307
Sperm whale	4,132	3,312	2,561	1,520	1,192
Mink whale	3,377	4,198	2,800	3,140	3,658
Bottlenose whale	13	44	36	-	31
Pilot whale	11	6	11	-	1
Others	4	2	-	31	2

Notes: 1) Excluding whales.

2) Actual number of catch.

I - 4 CATCH IN VALUE

Species	1976	1977	1978	1979	1980
Total	2,207,736	2,565,646	2,463,583	2,658,652	2,783,778
Marine Fisheries	1,770,243	2,051,325	1,891,406	2,055,936	2,133,627
Fishes	1,302,713	1,530,142	1,346,818	1,499,662	1,549,576
Tunas, albacore	245,993	278,989	252,448	336,479	333,837
Marlins, swordfishes	30,694	32,143	26,510	30,491	31,755
Skipjack, frigate mackerel	86,747	103,870	78,790	85,765	114,614
Sharks, rays	5,595	6,728	5,402	7,351	7,679
Salmons, trouts	96,800	111,084	121,991	116,709	104,367
Herring	13,479	4,872	1,856	2,015	3,158
Sardine, round herring	45,390	62,566	47,184	59,860	73,866
Anchovy	18,038	20,851	12,925	14,204	15,433
Jack mackerel, scads	58,780	68,525	48,405	58,671	54,026
Mackerels	70,710	79,494	57,905	69,784	82,075
Saury	21,585	41,117	35,591	19,542	19,918
Yellowtails	36,685	28,140	32,614	35,097	35,002
Flounders, halibuts, soles	80,608	93,865	96,290	104,368	107,848
Cod	14,630	16,766	18,315	17,657	18,855
Alaska pollack	111,457	147,261	124,040	125,899	124,866
Atka mackerel	8,014	10,996	6,134	6,702	8,555
Rockfishes	16,758	17,237	14,339	18,328	16,729
Croakers	8,235	8,910	7,719	8,347	7,650
Hairtail	7,098	8,594	6,450	8,442	11,849
Sea breams	42,549	47,223	48,405	50,215	49,843
Spanish mackerels	6,073	11,935	6,040	5,556	6,888
Sand lance	13,181	15,321	8,944	7,724	11,660
Others	263,614	313,655	281,244	310,456	309,103
Crustaceans	97,380	103,475	108,996	114,662	117,137
Spiny lobster	4,858	5,081	5,388	5,681	6,207
"Kuruma" prawn	9,119	10,482	11,294	10,650	11,062
Other prawns, shrimps	50,961	50,685	54,156	57,711	58,833
King crab	731	178	94	248	43
Queen crab	13,027	15,117	18,005	18,005	17,592
Other crabs	18,684	21,932	20,511	22,367	23,400
Molluscs	308,052	349,634	370,636	367,157	385,141
Common squid	119,884	125,603	122,313	120,351	119,724
Other squids, cuttlefishes	80,490	101,886	124,705	110,996	128,215
Octopuses	29,330	32,786	27,339	28,740	22,920
Abalones	16,029	16,136	18,082	16,981	19,991
Short necked clam	11,969	17,236	23,003	23,121	26,809
Common scallop	8,203	10,551	11,327	17,567	20,679
"Mogai" clam	1,413	1,016	736	1,112	293
Other clams, shellfishes	40,734	44,420	43,131	48,289	46,510

BY SPECIES, 1976~1980

Unit: Million yen

Species	1976	1977	1978	1979	1980
Echinodermata, etc.	28,874	36,845	36,120	40,095	40,177
Sea urchins	14,313	17,203	16,418	19,200	18,994
Sea cucumbers	5,064	4,349	4,470	5,167	5,106
Other marine animals	9,497	15,293	15,232	15,728	16,077
Marine mammals	298	186	302	129	260
Seaweeds	32,926	31,043	28,081	34,261	41,336
Kelps	23,594	20,969	19,752	25,009	30,450
"Wakame" seaweed	2,449	2,706	1,826	1,751	2,649
Agar-agar	2,011	2,068	2,009	2,292	1,686
Other	4,872	354,934	4,494	5,209	6,551
Marine Cultures	293,343	352,156	401,321	422,892	468,738
Yellowtails	91,159	120,313	116,484	132,318	139,553
Pearl	22,158	25,456	22,128	32,176	46,062
Oyster	24,455	27,803	24,694	23,138	28,462
Common scallop	19,227	23,153	16,040	11,274	11,938
"Nori" laver	94,089	108,267	166,950	157,694	152,874
"Wakame" seaweed	11,271	9,232	8,478	10,355	13,916
Others	30,984	37,932	46,547	55,937	75,933
Inland Water Fisheries	41,479	48,627	50,827	52,705	57,822
Salmons, trouts	3,177	3,445	3,625	4,001	5,448
Sweet fish	16,124	19,148	20,070	20,814	21,550
Common carp, crucian carp	5,008	5,578	6,111	6,392	7,049
Eel	2,558	2,845	2,816	3,076	2,103
Fresh water clams	4,822	6,434	6,924	6,634	6,459
Others	9,790	11,177	11,375	93,622	15,213
Inland Water Cultures	81,082	92,986	107,622	116,415	110,986
Trouts	9,008	10,764	11,743	14,347	17,636
Sweet fish	6,734	8,488	11,011	12,266	9,802
Common carp, crucian carp	10,808	13,218	14,197	12,664	10,758
Eel	51,452	56,863	66,748	71,465	63,605
Others	3,080	3,653	3,923	5,673	9,185
Whalings	21,589	20,552	12,409	10,704	12,605

I - 5 CATCH IN QUANTITY AND VALUE

Type of Fisheries	1976		1977	
	Q	V	Q	V
Total 1)	10,655,903	2,186,147	10,756,794	2,545,094
Marine Fisheries	9,605,283	1,770,243	9,687,586	2,051,325
Mother ship types				
Mother ship type trawl.....	764,416	41,064	563,208	47,247
Mother ship type salmon fishery..	32,418	20,020	23,565	17,608
Mother ship type crab fishery....	8,100	4,177	9,770	5,838
Mother ship type tuna long line..	1,229	676	501	---
Trawls				
Large trawls in N.Pacific Ocean..	1,170,959	84,942	1,013,519	79,339
Large trawl in Southern Ocean ...	301,471	65,411	407,144	77,286
Large trawl in East China Sea....	184,882	63,039	206,182	71,910
Shrimp trawl	3,341	4,711	2,901	5,104
Medium trawl (one boat operation)	1,388,533	86,623	916,909	105,425
(two boats operation)	60,259	17,906	68,276	19,438
Small trawls	287,890	112,390	323,789	136,171
Surrounding nets				
Large and medium surrounding net				
(one boat operation).....	1,429,651	127,472	2,016,216	149,447
(two boats operation).....	162,717	6,943	128,258	5,304
Purse seine(one boat operation)..	359,914	35,984	411,759	43,773
(two boats operation)..	267,165	23,558	269,761	27,977
Others	20,495	7,410	25,823	4,851
Lift nets				
Saury stick held dip net	99,435	20,411	244,159	39,394
Others	115,675	13,649	108,711	15,102
Gill nets				
Salmon drift gill net	48,973	37,746	38,354	33,354
Others	295,270	88,874	335,612	100,096
Seine nets				
Beach seine	11,371	2,631	10,054	2,629
"Patch" seine	110,334	17,766	136,817	21,428
Boat seine	136,718	34,168	140,819	41,640
Set nets				
Salmon large set net	34,318	29,607	42,786	43,964
Other large set net	164,564	43,622	166,347	46,192
Small set nets	132,604	38,242	147,289	47,786
Anglings				
Skipjack pole-and-line				
on distant waters	253,306	72,748	205,872	20,077
Skipjack pole-and-line				
on offshore waters	154,141	39,910	120,204	41,108
Skipjack pole-and-line				
on coastal waters	19,133	6,115	17,589	6,652
Mackerel pole-and-line.....	93,570	5,322	139,058	10,812
Other mackerel anglings	8,168	1,036	8,306	1,188
Squid angling	377,261	146,536	346,542	159,830
Others	95,410	58,159	87,039	62,244
Long lines				
Tuna long line on distant waters	191,436	149,990	201,596	2) 185,781
Tuna long line on offshore waters	81,681	49,611	95,369	62,199
Tuna long line on coastal waters	22,081	12,788	22,042	12,626
Salmon long line	3,035	2,320	2,345	2,078
Others	72,759	35,633	75,868	41,801
Others				
N. Pacific Ocean tanner crab				
fishery	5,822	3,424	3,710	2,406
N. Pacific Ocean long line				
and gill net	30,966	10,589	23,349	8,576
Shellfish collecting	222,356	45,887	216,495	51,284
Seaweed collecting	223,210	32,461	203,125	30,473
Other fisheries	158,246	69,167	167,661	73,892
Marine Cultures	849,909	293,343	861,389	352,156
Inland Water Fisheries	124,066	41,479	125,660	48,627
Inland Water Cultures	76,645	81,082	82,159	92,986
Whalings				
Antarctic mother ship type	5,043	15,290	5,421	13,720
N. Pacific mother ship type.....	1,631	3,440	1,485	3,360
Coastal large type	2,570	3,000	2,093	3,140
Coastal small type	388	330	300	340

Notes: 1) Excluding whalings.

BY FISHERY TYPE, 1976~1980

Unit { Quantity : Metric tons
Value : Million yen

1978		1979		1980	
Q	V	Q	V	Q	V
10,828,289	2,451,174	10,590,423	2,647,948	846	2,771,173
9,682,927	1,890,954	9,476,793	2,055,936	9,908,554	2,133,627
555,706	52,219	542,780	45,457	553,678	42,282
15,399	16,992	15,449	15,191	15,441	14,681
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622,496	71,318	595,962	81,617	667,791	75,526
261,004	65,749	222,848	49,231	202,816	47,880
197,769	64,880	199,478	69,322	198,705	73,567
2,720	4,896	3,105	7,676	3,437	8,081
824,829	89,387	853,704	102,162	799,710	103,263
59,980	18,193	59,320	19,101	60,090	20,330
339,240	141,206	355,119	154,240	343,403	154,834
2,449,046	113,613	2,397,823	160,187	2,562,588	182,739
68,324	1,914	44,485	1,916	61,646	2,769
499,552	42,248	548,292	48,588	559,692	54,369
269,333	21,608	258,564	21,632	256,859	22,536
10,540	4,385	5,494	2,969	5,329	2,929
350,617	34,886	266,741	18,402	180,328	19,150
140,809	15,105	136,093	15,163	178,856	18,465
25,287	25,079	26,077	19,948	26,069	17,969
344,758	107,551	349,748	113,421	382,306	137,122
8,935	2,671	6,882	2,404	7,469	1,928
110,599	16,449	88,838	17,629	125,337	13,476
131,963	42,934	123,524	39,228	164,570	37,496
49,754	63,334	69,977	65,986	59,413	52,924
180,626	46,186	184,774	51,519	246,499	54,861
144,661	46,520	146,751	48,160	156,160	49,425
231,703	54,127	197,870	57,854	206,822	69,826
161,445	34,409	143,424	35,987	143,145	46,645
23,840	7,103	20,165	6,954	23,674	8,974
28,548	1,255	6,713	1,423	2,735	246
4,658	683	3,310	529	3,529	682
363,670	170,328	333,850	165,845	451,209	161,272
90,649	59,013	89,660	63,021	88,939	64,064
2) 200,888	2) 160,563	2) 205,042	2) 220,799	211,997	212,735
101,490	51,553	97,164	64,475	106,231	67,374
23,313	11,336	24,312	14,706	23,063	15,454
2,026	1,698	1,964	1,566	1,929	1,151
96,587	43,083	93,949	46,601	103,942	48,358
3) 15,797	3) 8,820	3) 15,731	3) 9,061	7,892	4,702
24,338	6,365	29,664	8,932	46,800	10,831
215,162	59,468	180,061	55,936	176,157	61,996
159,589	26,700	183,272	33,380	179,890	40,673
275,277	85,132	348,834	97,718	312,408	110,042
917,244	401,321	882,620		991,843	468,738
138,185	50,912	136,441	52,705	127,735	57,822
89,933	107,622	94,569	116,415	93,714	110,986
2,950	7,560	2,933	6,410	3,279	7,703
735	1,690	226	890	-	-
1,792	2,790	1,321	2,770	1,499	4,230
447	570	438	630	413	672

Notes: 2) Including mother ship type tuna long line

3) Including mother ship type crab fishery

I — 6 CATCHES OF MAJOR SPECIES

(1) Tunas, albacore

Unit: Metric tons

	1976	1977	1978	1979	1980
Total Catch	367,793	336,530	384,674	362,917	378,496
Tuna long line					
mother ship type	347	461	1) ...	...	...
in distant waters	155,938	171,239	166,844	168,656	175,280
in offshore waters	56,279	65,870	76,027	66,429	74,164
in coastal waters	17,095	16,836	16,852	17,435	16,417
Skipjack pole-and-line	112,877	56,267	80,159	58,927	65,209
Surrounding nets	14,399	16,177	24,827	30,934	32,979
Others	10,858	9,680	20,809	20,536	14,447

(2) Marlins, swordfishes

Total Catch	45,155	41,548	46,627	43,357	44,122
Tuna long line					
mother ship type	861	30	1) ...	...	...
in distant waters	24,726	19,938	23,269	24,465	23,359
in offshore waters	8,389	9,911	9,903	10,714	10,355
in coastal waters	1,508	1,838	2,236	2,220	2,329
Other gill nets	7,746	8,164	9,295	4,375	6,218
Others	1,925	1,667	1,924	1,583	1,861

(3) Skipjack

Total Catch	331,047	309,407	369,530	329,948	354,156
Skipjack pole-and-line					
in distant waters	170,416	168,993	172,428	153,609	166,068
in offshore waters	122,146	96,343	136,814	127,350	115,962
in coastal waters	10,070	12,099	17,673	16,922	13,538
Surrounding nets (one boat)	20,400	24,396	31,810	29,481	49,137
Surrounding nets (two boats)	628	114	287	106	175
Other anglings	5,596	4,569	7,280	7,715	6,476
Others	1,791	2,893	3,238	5,235	2,800

(4) Salmons, trouts

Total Catch	126,094	116,465	102,760	131,021	122,515
Mother ship type salmon fishery.	32,418	23,565	15,399	15,449	15,441
Salmon drift gill net	48,973	38,354	25,287	26,077	26,069
Salmon large set net	34,254	37,349	45,198	65,992	52,197
Small set nets	5,180	6,958	6,901	9,879	9,690
Other long lines	3,137	2,539	2,266	2,001	2,860
Others	2,132	7,700	7,709	11,623	16,258

(5) Herring

Total Catch	66,083	19,873	6,708	6,619	11,154
Mother ship type trawl	2,272	564	281	14	15
Large trawl in Southern Ocean ..	868	1	2	-	-
Medium trawl (one boat)	22,460	8,151	3,174	3,823	9,585
Other gill nets	34,575	5,098	984	480	988
Others	5,908	6,059	2,267	2,502	566

Note : 1) Including mother ship type tuna long line.

BY FISHERY TYPE, 1976~1980

(6) Sardine, round herring

Unit: Metric tons

	1976	1977	1978	1979	1980
Total Catch	1,118,168	1,464,655	1,687,953	1,866,495	2,236,158
Surrounding nets (one boat)	761,233	1,016,906	1,247,384	1,448,395	1,677,905
Surrounding nets (two boats)	276,214	279,148	236,787	208,289	234,409
Other surrounding nets	1,919	1,325	639	88	342
Other lift nets	13,136	22,663	28,444	50,640	45,726
Set nets	50,642	79,875	103,069	114,194	179,277
Others	15,024	64,738	71,630	44,889	98,499

(7) Anchovy

	1976	1977	1978	1979	1980
Total Catch	216,664	244,933	152,428	134,577	150,606
Surrounding nets (one boat)	45,498	63,526	36,335	28,706	48,079
Surrounding nets (two boats)	58,426	58,054	39,242	31,789	37,288
Set nets	10,045	17,956	11,304	8,969	10,407
"Patchi" seine	58,423	54,242	33,453	33,332	22,784
Boat seine	31,949	37,406	22,238	24,404	25,750
Others	12,323	13,749	9,856	7,377	6,298

(8) Jack mackerel, scads

	1976	1977	1978	1979	1980
Total Catch	206,667	185,801	153,131	183,883	144,979
Surrounding nets (one boat)	168,161	150,650	126,125	159,689	118,984
Surrounding nets (two boats)	11,581	8,656	3,891	5,267	3,787
Other lift nets	6,455	7,243	8,275	4,835	8,585
Set nets	10,700	9,329	6,904	7,571	7,448
Others	9,770	9,923	7,936	6,521	6,175

(9) Mackerels

	1976	1977	1978	1979	1980
Total Catch	978,826	1,355,309	1,625,865	1,414,183	1,301,122
Surrounding nets (one boat)	713,855	1,106,790	1,404,489	1,150,945	1,092,895
Surrounding nets (two boats)	72,832	40,445	40,115	41,510	25,095
Mackerel pole-and-line	93,470	138,113	28,449	6,673	2,698
Set nets	60,618	30,813	27,565	24,527	26,830
Others	38,051	39,148	125,247	190,528	153,604

(10) Saury

	1976	1977	1978	1979	1980
Total Catch	105,419	253,465	360,213	277,960	187,155
Saury stick held dip net	99,254	243,844	350,532	266,652	180,250
Other gill nets	3,177	2,996	2,800	3,772	2,803
Set nets	2,668	5,673	5,041	7,262	4,055
Others	320	952	1,840	274	47

I - 6 CATCHES OF MAJOR SPECIES

(11) Yellowtails

Unit: Metric tons

	1976	1977	1978	1979	1980
Total Catch	42,763	26,915	37,414	44,970	42,009
Surrounding nets	6,553	3,427	5,423	10,677	10,008
Large set nets	11,574	6,695	13,264	12,545	10,236
Small set nets	3,647	2,832	5,078	5,191	5,188
Other gill nets	4,034	2,995	3,136	4,031	5,042
Other anglings	13,955	9,046	8,282	9,699	9,095
Others	3,000	1,920	2,231	2,827	2,440

(12) Flounders, halibuts, soles

	1976	1977	1978	1979	1980
Total Catch	352,134	288,025	313,830	288,896	288,881
Mother ship type trawl	104,313	62,819	57,059	56,739	58,707
Large trawls in N.Pacific Ocean..	80,729	75,324	105,790	89,086	89,700
Large trawl in East China Sea ...	22,351	16,616	15,638	15,213	16,836
Medium trawls	66,020	55,580	54,962	50,648	47,488
Small trawls	26,038	27,755	27,430	27,924	27,019
Other gill nets	36,896	39,320	39,394	35,401	35,800
Others	15,787	10,611	13,557	13,885	13,331

(13) Cod

	1976	1977	1978	1979	1980
Total Catch	90,468	85,252	89,016	91,829	96,742
Mother ship type trawl	19,200	18,456	16,617	14,766	9,939
Large trawls in N.Pacific Ocean..	26,264	20,213	27,643	19,005	19,319
Medium trawls	23,943	27,143	18,521	15,978	16,949
Other gill nets	7,033	7,611	8,280	11,089	11,904
Other long lines	6,351	4,221	3,607	13,810	3,377
Others	7,671	7,608	14,348	17,181	35,254

(14) Alaska pollack

	1976	1977	1978	1979	1980
Total Catch	2,445,423	1,931,072	1,546,176	1,551,116	1,552,421
Mother ship type trawl	630,182	478,155	475,244	464,803	479,734
Large trawls in N.Pacific Ocean..	911,740	803,207	394,015	396,681	463,846
Medium trawls	805,672	489,342	499,324	524,599	431,381
Other gill nets	72,539	122,372	115,832	120,441	107,421
Other long lines	17,199	23,855	44,656	33,466	54,369
Others	8,091	14,141	17,105	11,126	15,670

(15) Sea breams

	1976	1977	1978	1979	1980
Total Catch	29,325	29,664	29,433	28,825	28,151
Large trawl in Southern Ocean ...	1,293	1,658	-	-	-
Large trawl in East China Sea ...	4,396	4,112	4,720	5,006	4,657
Small trawls	2,607	2,802	3,171	2,783	2,926
Other gill nets	3,210	3,000	2,938	3,052	3,286
Boat seine	3,552	3,728	4,248	3,912	3,899
Other angling and long lines	9,763	10,014	9,441	9,717	8,786
Others	4,504	4,350	4,915	4,355	4,597

BY FISHERY TYPE, 1976~1980 (Continued)

(16) Sand lance

Unit: Metric tons

	1976	1977	1978	1979	1980
Total Catch	224,390	137,340	99,078	110,484	201,226
Medium trawls	117,817	57,338	28,807	36,661	55,050
Other lift nets	48,199	32,513	32,686	33,154	74,875
"Patchi" seine	6,841	3,906	6,454	3,960	9,637
Boat seine	42,347	31,786	26,469	28,658	51,586
Small set nets	7,201	7,861	2,333	2,755	1,532
Others	1,985	3,936	2,329	5,296	8,546

(17) Lobster, shrimps, prawns

	1976	1977	1978	1979	1980
Total Catch	61,022	53,427	59,676	52,661	50,505
Large trawls in N.Pacific Ocean..	4,103	-	-	-	-
Shrimp trawl	3,341	2,901	2,720	3,008	3,320
Large trawl in East China Sea ...	6,924	4,191	4,510	3,364	2,460
Medium trawls	3,674	4,071	3,852	3,528	3,124
Small trawls	30,142	32,216	36,808	32,229	31,424
Other surrounding nets	2,941	99	3	3	0
Others	9,897	9,952	11,783	10,529	10,177

(18) Crabs

	1976	1977	1978	1979	1980
Total Catch	66,571	71,619	80,359	80,269	77,560
Mother ship type crab fishery ...	8,100	9,700	...	...	...
Medium trawls	4,133	4,280	3,985	3,634	3,497
Small trawls	5,306	5,668	6,277	6,306	5,592
Other gill nets	4,837	3,911	3,408	3,553	3,570
Other fishery (crab cages,etc.)..	37,967	43,726	50,326	50,507	56,632
Others	6,228	4,334	1) 16,363	16,269	8,269

(19) Squids, cuttlefishes

	1976	1977	1978	1979	1980
Total Catch	501,869	512,579	519,747	528,831	686,611
Large trawl in Southern Ocean ...	29,122	50,778	30,201	63,679	62,321
Large trawl in East China Sea ...	18,816	27,784	26,931	25,174	26,624
Medium trawls	21,764	29,628	19,311	27,916	28,114
Set nets	16,188	19,660	15,288	15,665	22,863
Squid angling	376,890	346,043	363,272	333,185	451,046
Others	39,089	38,686	64,744	63,212	95,643

(20) Octopuses

	1976	1977	1978	1979	1980
Total Catch	66,873	67,913	65,441	51,986	46,105
Large trawl in Southern Ocean ...	24,645	26,100	19,818	9,633	17
Medium trawls	2,025	2,445	2,727	3,249	3,062
Small trawls	10,129	8,078	9,828	9,569	9,128
Other long lines	5,808	4,925	7,205	6,200	6,934
Other fishery (octopus pots)	20,177	21,549	22,024	19,477	22,377
Others	4,089	4,816	3,839	3,858	4,587

Note : 1) Including mother ship type crab fishery.

I - 7 INDEX OF FISHERY PRODUCTION BY TYPE OF FISHERIES, 1976~1980 (1975=100)

Group	1976	1977	1978	1979	1980
Fisheries total	102.0	101.5	105.4	106.0	108.7
Marine fisheries and marine cultures	103.5	106.0	104.2	104.1	108.7
Distant water fisheries 1)	93.3	97.3	85.9	83.9	86.0
Offshore fisheries 2)	108.1	108.9	127.2	134.6	143.4
Coastal fisheries 3)	100.6	106.2	105.5	104.7	112.1
Fisheries using fishing boat ...	106.2	111.0	117.2	103.6	111.1
Set net and beach seine fisheries	81.0	89.2	63.7	108.4	115.6
Marine cultures	109.4	116.3	128.6	136.2	145.7
Costal fisheries and marine cultures	103.6	109.6	113.3	115.4	123.5
Inland water fisheries and inland water cultures	108.4	113.0	125.0	135.7	134.6
Whalings	55.7	51.8	30.1	21.3	22.0

Notes : 1) This type of fisheries covers mother ship type fisheries, large trawl in Eastern China Sea, distant water trawls, tuna long line on distant water, skipjack pole-and-line on distant waters, North Pacific Ocean tanner crab fishing, North Pacific Ocean long line and gill net.

2) This type of fisheries covers fisheries operating with powered boat of more than 10 gross tonnage except for fisheries on distant waters, collecting shellfish, collecting seaweeds, set net and beach seine.

3) This type of fisheries covers fisheries operating without fishing boat, with non-powered boat, with powered boat less than 10 gross tonnage including collecting shellfish, collecting seaweeds, set net and beach seine.

4) The calculation method of the index is as follows:

(1) The items adopted amount to 125 commodities; 75 for marine fisheries, 15 for marine cultures, 10 for whaling, 14 for inland water fisheries, and 7 for inland water cultures.

(2) Formula

The index numbers are computed by the Laspeyres formula.

$$Q_{0t} = \frac{\sum W_0(q_t/q_0)}{\sum W_0}$$

W_0 : Weights of the base period.

q_0 : Quantity of production in the base period.

q_t : Quantity of production in the current period.

(3) Weight

The weights were determined by the production value for 1974 and 1975 obtained by multiplying quantity of production by price, and expressed as portions of 10,000.

I — 8 INDEX OF FISHERY PRODUCTION BY SPECIES, 1976~1980 (1975=100)

Item	1976	1977	1978	1979	1980
Marine Fisheries					
Bluefin tuna	102.7	127.5	114.3	108.7	121.6
Albacore	155.5	78.5	127.3	97.0	101.2
Bigeye tuna	101.2	113.1	112.5	115.0	108.6
Yellowfin tuna	119.2	115.2	136.2	138.5	165.4
Striped marlin	75.5	63.5	71.7	71.4	76.6
Broadbill swordfish	106.9	94.4	98.1	94.0	84.7
Skipjack	128.0	119.6	142.8	127.5	136.9
Sharks	104.2	117.9	99.7	101.4	101.0
Salmons	84.5	70.6	74.7	95.2	90.5
Trouts	67.2	78.7	41.8	53.4	46.6
Herring	99.2	29.8	10.1	10.2	16.7
Sardine	202.6	269.9	311.3	330.8	417.8
Anchovy	88.4	99.9	62.2	54.9	61.4
Jack mackerel	68.8	47.1	31.2	44.4	28.9
Mackerels	74.3	102.8	123.3	113.1	98.7
Saury	47.6	114.4	162.6	125.4	84.5
Yellowtail	111.6	70.2	97.6	117.4	109.6
Flounders, soles	101.1	82.5	89.9	82.7	82.6
Cod	97.9	92.3	96.4	99.5	104.7
Alaska pollack	91.3	72.1	57.7	57.9	58.0
Red sea bream	100.3	100.5	99.1	94.6	89.5
Sand lance	81.6	50.0	36.0	40.2	73.2
King crab	69.0	5.5	7.1	14.8	3.1
Common squid	79.6	62.0	68.0	74.7	87.7
Octopuses	90.4	91.8	88.5	70.3	62.3
Sea urchins	102.6	119.6	115.3	117.9	107.5
Sea cucumbers	112.8	104.4	108.1	100.0	95.6
Abalone	104.4	96.1	99.3	89.6	90.1
Kelp	100.9	84.3	69.0	83.4	79.1
Marine Cultures					
Yellowtail	110.0	124.4	131.8	167.7	161.7
"Kuruma" prawn	111.3	120.1	126.5	158.1	165.2
Oyster	112.5	105.8	115.4	102.2	129.9
Common scallop	92.4	118.4	96.4	62.1	57.5
"Nori" laver	105.4	99.3	126.7	117.1	128.6
"Wakame" seaweed	124.2	123.3	100.6	98.3	111.2
Inland Water Fisheries					
Salmons	55.1	53.3	60.1	92.9	139.4
Pond smelt	123.4	130.6	99.8	109.0	104.2
Sweet fish	95.0	96.4	95.8	106.2	105.5
Common carp	103.9	100.9	110.1	117.3	126.6
Crucian carp	102.3	104.3	108.7	110.7	101.8
Inland Water Cultures					
Rainbow trout, etc.	100.7	105.3	113.8	110.4	119.4
Sweet fish	114.7	117.7	144.0	169.4	160.1
Common carp	93.5	104.1	103.7	97.6	89.0
Eel	126.5	133.2	154.7	177.3	176.5

II STRUCTURE OF FISHERY PRODUCTION

II — 1 NUMBER OF MARINE FISHERIES ESTABLISHMENTS, 1976~1980

Unit : Number

Type and size of management	1976	1977	1978	1979	1980
Grand Total	224,610	222,395	217,734	219,112	216,433
Without fishing boat	10,979	9,728	10,471	9,051	8,481
With non-powered boats	2,780	1,943	2,964	1,636	1,357
With powered boats					
Sub-total	149,589	151,393	147,751	150,438	149,087
Less than 3 G.T.	100,180	99,043	92,440	93,327	91,260
3 - 5	29,581	31,307	33,384	33,998	34,366
5 - 10	9,545	10,455	10,989	11,495	11,865
10 - 30	5,665	5,999	6,432	7,046	7,125
30 - 100	2,862	2,796	2,808	2,827	2,757
100 - 200	648	699	645	675	658
200 - 500	593	577	545	547	536
500 - 1,000	297	308	300	308	298
1,000 G.T. and over	218	209	208	215	222
Set nets and beach seine					
Sub-total	7,938	8,113	8,135	8,381	8,495
Large set nets	1,027	1,042	1,217	1,113	1,160
Small set nets	6,240	6,470	6,263	6,729	6,789
Beach seine	671	601	655	539	546
Culture					
Sub-total	53,324	51,218	48,413	49,606	49,013
Laver culture	28,875	26,874	24,913	24,882	24,162
Oyster culture	3,444	3,942	3,924	4,121	4,293
Pearl culture	1,824	1,883	1,755	1,783	1,794
Wakame seaweed culture ...	8,780	8,116	6,870	7,203	7,095
Yellowtail culture	3,185	3,316	3,473	3,560	3,457
Common scallop culture ...	3,987	3,682	3,496	3,482	3,191
Other cultures	3,229	3,405	3,982	4,575	5,021

Note : Excluding the number of fisheries establishments which engaged in fishing for less than 30 days in a year.

II — 2 NUMBER OF MARINE FISHERY WORKERS, 1976~1980

Unit : Thousand men

	1976	1977	1978	1979	1980
Grand Total	469.7	459.3	478.1	467.8	457.4
Men	389.0	379.1	398.0	387.3	376.9
15 - 39 years old	135.9	126.9	134.5	125.4	118.2
40 - 59 years old	186.8	186.9	199.6	197.2	193.6
60 years old and over	66.2	65.3	63.9	64.7	65.1
Women	80.7	80.2	80.1	80.5	80.5

II — 3 NUMBER OF FISHING BOATS, 1976~1980

Unit : Number

Size	1976	1977	1978	1979	1980
Total	424,391	434,193	435,784	444,413	449,847
Marine	399,156	408,851	412,423	423,820	428,854
Non-powered	40,046	35,785	29,866	28,402	27,504
Powered	359,110	373,066	382,557	395,418	401,350
Less than 5 G.T.	328,800	341,068	349,044	359,984	364,867
5 - 9	12,159	13,267	14,138	15,211	15,896
10 - 49	10,915	11,406	12,171	12,924	13,190
50 - 99	4,043	4,058	3,916	3,911	3,943
100 - 199	1,303	1,350	1,398	1,453	1,450
200 - 499	1,624	1,664	1,647	1,689	1,758
500 - 999	85	77	76	72	71
1,000 G.T. and over	181	176	167	174	175
Inland Water	25,235	25,342	23,361	20,593	20,993
Non-powered	8,714	8,624	7,324	6,319	5,277
Powered	16,521	16,718	16,037	14,274	15,716
Less than 5 G.T.	16,514	16,709	16,025	14,274	15,707
5 G.T. and over	7	9	12	-	9
Number of F.R.P. Boats in Marine					
Total	92,301	117,121	142,729	168,493	194,556
Less than 1 G.T.	34,635	41,844	48,766	54,994	63,644
1 - 3	36,127	46,612	57,450	69,025	80,585
3 - 5	16,962	21,917	27,522	32,877	37,120
5 - 10	2,743	4,073	5,350	6,938	7,947
10 - 20	1,590	2,360	3,268	4,215	4,762
20 G.T. and over	244	315	373	444	490

II — 4 GROSS TONNAGES OF FISHING BOATS, 1976~1980

Unit : G. T.

Size	1976	1977	1978	1979	1980
Total	2,668,452	2,719,646	2,687,825	2,790,159	2,833,684
Marine	2,649,615	2,699,877	2,668,772	2,775,048	2,815,194
Non-powered	32,624	30,318	27,128	25,250	24,153
Powered	2,616,991	2,669,559	2,641,644	2,749,797	2,791,041
Less than 5 G.T.	549,044	575,815	599,754	627,970	636,939
5 - 9	94,641	103,887	111,423	120,022	125,534
10 - 49	225,896	230,283	239,636	250,153	252,374
50 - 99	321,272	321,244	305,447	304,334	305,776
100 - 199	186,573	192,272	199,491	207,358	205,635
200 - 499	522,037	547,175	544,401	560,814	584,007
500 - 999	64,717	59,215	58,869	56,070	55,189
1,000 G.T. and over	652,811	639,667	582,624	623,073	622,598
Inland Water	18,837	19,769	19,052	15,111	18,490
Non-powered	4,487	4,400	3,710	3,381	2,681
Powered	14,350	15,369	15,342	11,729	15,809
Less than 5 G.T.	14,290	15,297	15,252	11,729	15,742
5 G.T. and over	60	72	90	-	67
Gross Tonnages of F.R.P. Boats in Marine					
Total	216,235.09	287,040.60	362,860	445,406	506,363
Less than 1 G.T.	24,709.70	29,770.95	34,814	39,718	45,709
1 - 3	58,873.90	76,724.60	95,199	117,735	135,535
3 - 5	73,734.64	95,431.18	119,981	143,719	161,905
5 - 10	21,220.77	31,926.52	42,467	55,554	63,423
10 - 20	24,543.51	36,304.94	50,203	64,744	73,464
20 G.T. and over	13,152.57	16,882.41	20,197	23,932	26,326

III MARKETING OF FISHERY PRODUCT

III — 1 QUANTITY AND PRICE OF LANDINGS BY COMMODITY AT FISH MARKETS IN PRODUCING AREAS, 1980

Commodity	Quantity of landings	Price	Commodity	Quantity of landings	Price
Total of fishes, other marine animals, marine mammals and whales	5,534,658	160	Saury	160,417	119
Bluefin tuna			Common squid		
Fresh	7,618	1,286	Fresh	84,219	324
Frozen, round type	27,310	2,066	Frozen	127,918	287
Frozen, fillet type	1,145	1,648	Bastard halibut	4,697	1,377
Albacore			Flounders, soles		
Fresh	28,239	449	Fresh	61,457	370
Frozen, round type	41,457	396	Frozen	55,872	245
Frozen, fillet type	19		Cod		
Bigeye tuna			Fresh	23,824	219
Fresh	14,086	1,175	Frozen	37,060	213
Frozen, round type	80,484	831	Alaska pollack		
Frozen, fillet type	110	892	Fresh	594,320	75
Yellowfin tuna			Frozen	22,962	135
Fresh	35,825	674	Atka mackerel	79,656	68
Frozen, round type	49,748	519	"Menuke" Rockfishes		
Frozen, fillet type	19	591	Fresh	4,537	556
Other tunas			Frozen	7,873	436
Fresh	17,762	477	"Kichiji" Rockfishes	9,130	657
Frozen	2,076	318	Sand fish	5,274	357
Striped marlin			Deep sea smelts	3,477	204
Fresh	5,927	632	Sharks		
Frozen, round type	6,165	663	Fresh	29,644	133
Frozen, fillet type	27	361	Frozen	5,459	251
Broadbill swordfish			Yellow 'croaker	3,890	197
Fresh	7,290	684	Other croakers	24,778	220
Frozen, round type	1,032	760	Lizard fishes	18,388	111
Frozen, fillet type	5,050	781	Butter fish	2,961	783
Black marlins			Sharp toothed eel	13,814	243
Fresh	3,664	594	Hairtail	20,106	164
Frozen, round type	7,540	481	Gurnards	2,568	366
Frozen, fillet type	66	484	Skates and rays	8,886	117
Other swordfish, marlins and sailfish			Rod sea bream	5,053	1,674
Fresh	1,868	814	Crimson sea bream	1,390	1,076
Frozen, round type	316	394	Yellow sea bream	6,782	1,099
Frozen, fillet type	494	435	Black sea bream	435	1,251
Skipjack			Other sea breams		
Fresh	96,436	324	Frozen	6,784	563
Frozen	162,128	305	Yellowtails	23,442	782
Salmons			Spanish mackerels		
Fresh	19,892	817	Fresh	19,260	227
Frozen	3,529	1,072	Frozen	3,543	447
Salted	17,895	1,298			
Salmons (Pink and cherry salmons)					
Fresh	4,743	525			
Frozen	2,218	544			
Salted	427	642			
Sardine	1,321,331	28			
Round herring	23,926	65			
Jack mackerel	29,927	636			
Scads	68,764	183			
Mackerels	1,026,771	56			

Notes: 1) The quantity of landings is of the 67 fishing ports in the producing areas.

2) The prices here show the average prices per Kg, which are obtained by dividing the value of landings by the quantities of landings.

			Unit { Quantity: Metric tons Price: yen per Kg		
Commodity	Quantity of landings	Price	Commodity	Quantity of landings	Price
Dolphin fishes	5,685	208	Total of shellfishes		
Flying fishes	941	539	With shell	19,961	345
Frigate mackerel	9,425	192	Shelled	1,968	937
Mallets	866	338			
Common sea bass	901	1,050	Abalones with shell	226	3,406
			Top shell with shell	864	972
Herring			Hard clams		
Fresh	7,415	305	With shell	3	503
Frozen	133	573			
Sand lance	115,892	43	Short-necked clams		
Anchovy	17,548	63	With shell	505	284
Post larval	1,394	207			
Other fishes			Common scallop		
Fresh	353,172	209	With shell	13,372	253
Frozen	61,585	328	Shelled	394	948
Salted	1,057	1,027			
Cuttlefishes			Hen clams		
Fresh	6,170	332	With shell	165	772
Frozen	2,549	-	Shelled	93	2,729
Other squids and cuttlefishes	238,180	261	"Mogai" clam		
			With shell	-	-
Octopuses			Shelled	-	-
Fresh	10,016	407	Oyster		
Frozen	499	409	With shell	112	580
Spiny lobster	83	5,006	Shelled	1,031	798
"Kuruma" prawn	251	2,828	Other shellfishes		
Other lobster, prawn and shrimps			With shell	4,713	325
Fresh	9,350	1,043	Shelled	450	623
Frozen	909	2,672			
King crab	93	402	Total of seaweeds		
Tanner crab	5,062	1,549	Fresh	818	306
Blue crabs	1,012	952	Dried	2,978	1,117
Other crabs	34,202	215	"Kombu" tangle		
Sea urchins			Dried	2,886	1,111
With shells	355	1,083	"Wakame" seaweed		
Shelled	209	10,243	Fresh	463	138
Sea cucumbers	864	505	Dried	35	2,517
Other marine animals			"Tengusa" agar-agar		
Fresh	14,129	186	Fresh	2	-
Frozen	0	1,248	Dried	4	640
Marine mammals	248	122	"Funori" seaweed		
Whale (by whaling)			Fresh	18	774
Fresh	-	-	Dried	2	657
Frozen	5,543	-	Other seaweeds		
Salted	-	-	Fresh	335	513
			Dried	50	1,030
			Total of dried laver	8,429	176
			"Kuronori" laver	8,429	176
			"Mazonori" laver	-	-
			"Aonori" laver	-	-

Note: 1) Quantity is expressed in unit of 10,000 sheets and price 10 sheets

III - 2 QUANTITY AND PRICE OF ARRIVALS BY COMMODITY AT TOKYO CENTRAL WHOLESALE MARKETS, 1980

Unit { Quantity : Metric tons
Price : yen per kg

Commodity	Quantity of arrivals	Price	Commodity	Quantity of arrivals	Price
Fresh			Shellfishes	52,420	763
Marine fishes	183,946	829	Abalones with shell	1,339	3,372
Bluefin tuna	3,299	2,318	Short necked clam with shell	7,050	371
Albacore	307	468	Oyster shelled	6,280	842
Bigeye tuna	1,994	2,194	Freshwater clam with shell	5,123	179
Yellowfin tuna	3,306	989	Other shellfishes	32,628	817
Other tunas	2,476	683			
Striped marlin	517	1,316	Frozen		
Broadbill swordfish	1,041	857	Bluefin tuna	17,076	2,174
Blue marlins	447	577	Albacore	2,170	519
Other marline	27	890	Bigeye tuna	44,281	1,019
Skipjacks	9,698	598	Yellowfin tuna	9,861	688
Salmons	2,351	871	Other tunas	-	-
Salmons (Pink and cherry salmons)	536	808	Striped marlin	3,673	916
Sardine	8,731	131	Bradbill swordfish	6,617	932
Round herring	70	336	Blue marlins	1,282	519
Jack mackerel	10,400	945	Other marlins	-	-
Mackerels	16,060	209	Skipjack	635	524
Saury	9,028	427	Salmons	21,852	995
Common squid	15,671	539	Salmons (Pink and cherry salmon)	2,190	843
Bastard halibut	1,058	1,591	Jack mackerel	5,899	343
Flat fishes	8,389	835	Mackerels	4,440	178
Cod	2,541	412	Saury	4,498	253
Atka mackerel	1,317	107	Common squid	19,743	413
Rock fishes	2,096	1,012	Flat fishes	10,158	417
Sharks	2,841	254	Cod	7,973	236
Yellow croaker	-	-	Rock fishes	4,324	478
Other croakers	1,077	404	Sea breams	5,676	453
Sharp toothed eel	185	903	Spanish mackerels	2,455	346
Hairtail	753	658	Herring	2,163	619
Red sea bream	1,330	1,691	Other fishes	48,799	456
Crimson sea bream	325	1,895	"Mong-ika" cuttlefish ..	11,055	1,023
Yellow sea bream	51	1,191	Other cuttlefishes	21,494	347
Yellowtail	22,439	1,001	Octopuses	9,017	803
Fishery	5,664	917	"Taisho ebi" prawn	9,732	1,947
Culture	16,775	1,029	Meat of whale		
Spanish mackerels	2,247	640	Fresh	258	1,207
Flying fishes	1,115	436	Frozen	1,782	931
Common sea bass	475	1,082	Processed fishery product		
Other fishes	36,408	879	Salted and dried		
Cuttlefish	1,587	962	Sardine, round herring ..	9,981	298
Other squids and cuttlefishes	2,773	667	Jack mackerel, scad	12,670	616
Octopuses	529	662	Mackerels	3,809	227
Spiny lobster	78	6,823	Saury	7,952	288
"Kurumaebi" prawn	64	6,767	Salted		
"Taisho ebi" prawn	611	1,693	Salmons	28,757	1,123
Other shrimps	3,280	2,338	Salmons (Pink and cherry salmons)	3,556	637
Crabs	2,399	1,112	Mackerels	350	289
Other marine animals	2,019	4,153	Other salted product	24,464	2,003
Inland water fishes	4,579	1,333	Processed whale products .	594	1,145
			Seaweeds	5,595	368
			Other processed fishers products	190,322	622

Note: The prices here show the average price which are obtained by dividing the value of arrivals by the quantities of arrivals.

III — 3 PRICES OF MAJOR FISHERY PRODUCTS BY STEPS OF DISTRIBUTION IN TOKYO, 1980

Unit : Yen per kg

commodity		Wholesale price	Broker price	Retail price	Ratio of retail price to wholesale price
					%
Bigeye tuna ₁₎	frozen	1,232	1,617	4,484	364
Yellowfin tuna ₁₎	frozen	662	1,152	2,206	333
Skipjack tuna ₁₎	fresh	710	829	1,583	223
Chum salmon ₁₎	salted	1,299	1,460	2,001	154
Sardine (Round fish)	fresh	161	210	380	236
Jack mackerel (Round fish)	fresh	1,170	1,393	1,841	157
Mackerel (Round fish)	fresh	246	301	401	187
	frozen	220	269	345	157
Saury (Round fish)	fresh	510	659	1,031	202
	frozen	278	406	740	266
Yellowtails ₁₎	fishery	908	1,117	2,098	231
	cultured	1,081	1,175	2,642	244
Common squid (Round fish)	fresh	654	761	1,068	163
	frozen	525	582	906	173
Oyster (Without shell)	fresh	1,011	1,175	1,917	190

Note : 1) Round fish for wholesale and broker price and sliced meat for retail price.

III—4 PROCESSED FISHERY

Processed products 1)	1976	1977	1978	1979	1980
Boiled and dried	84.2	86.9	82.4	98.0	97.9
Anchovies	63.9	62.5	63.2	78.4	79.6
Jack mackerel	2.9	1.9	1.7	1.1	0.6
Sand lance	9.5	11.8	7.7	9.1	9.1
Others	7.9	10.7	9.8	11.1	8.6
Cured	121.0	126.9	130.7	126.5	124.6
Mackerels	25.9	35.0	28.9	31.0	27.9
Skipjack	37.2	35.7	38.2	32.4	32.0
Others	57.9	56.2	63.6	63.1	64.7
Dried	42.7	39.9	37.5	30.6	32.7
Herring	19.2	17.4	18.9	14.4	12.1
Squids	8.6	9.4	7.6	5.9	11.5
Others	14.9	13.1	11.0	10.3	9.1
Dressed frozen	122.6	126.0	116.1	145.5	153.1
Frozen	3,111.1	3,200.1	3,153.2	3,171.6	3,134.2
Albacore, tunas	224.2	191.4	210.2	202.1	212.4
Cod, Alaska pollack	95.6	129.1	114.2	101.0	128.7
Halibut, flounders	143.1	103.0	136.2	112.3	113.0
Mackerels	336.0	414.2	518.3	574.8	508.3
Marlins	29.0	20.3	22.9	23.5	22.7
Sardines, anchovies	401.2	420.5	434.1	475.2	515.0
Saury	101.7	230.5	281.7	230.6	150.3
Skipjack	164.8	159.9	164.1	168.7	167.4
Squids, cuttlefishes	221.4	205.0	254.3	251.5	282.9
Whales	40.6	38.4	18.2	15.4	15.7
Minced fish meats	424.2	413.4	365.6	367.6	364.2
Others	929.3	874.4	633.4	668.9	653.6
Kneaded	1,136.7	1,087.0	1,037.2	976.2	911.1
"Chikuwa" 2)	235.3	214.4	190.9	177.2	174.4
Fish sausage	112.6	116.9	107.2	106.8	87.4
"Kamaboko" 3)	451.5	428.2	427.1	402.4	362.1
Others	337.3	327.5	312.0	289.8	287.2
Manure and feed	930.1	915.6	951.4	962.6	952.5
Fish meal	529.5	496.8	497.4	560.0	517.5
Dried press cake	208.7	257.0	299.9	238.5	254.4
Others	191.9	161.8	154.1	164.1	180.6
Oil and fat	165.6	208.2	243.5	253.4	263.1
Fish oil, fish viscera oil ..	141.1	187.2	230.7	245.8	255.9
Whale oil	24.5	21.0	12.8	7.6	7.2
Salted	199.7	227.5	242.7	250.9	255.9
Alaska pollack roe, cod roe..	40.6	36.4	23.0	25.0	32.2
Cod, Alaska pollack	15.0	17.4	19.0	18.4	18.6
Herring roe, salmon roe.....	14.1	12.8	12.5	10.4	11.9
Mackerels	26.2	44.1	75.1	62.0	63.4
Salmons	55.5	53.0	61.7	78.2	79.9
Trouts	22.6	38.0	11.0	17.5	17.5
Others	25.7	25.8	40.4	39.4	32.4

PRODUCTS, 1976~1980

Processed products	Unit { Thousand metric tons Canned: ton				
	1976	1977	1978	1979	1980
Salted and dried	250.9	242.1	246.0	255.3	275.5
Jack mackerel	53.3	48.7	50.2	52.4	51.9
Mackerels	35.6	26.7	28.6	30.0	30.2
Sardines, anchovies	72.6	78.2	74.8	71.0	77.3
Saury	11.2	18.4	28.1	32.2	35.2
Others	78.2	70.1	64.3	69.7	80.9
Smoked	10.3	10.0	12.1	11.3	10.6
Salmons, trouts	1.6	1.4	1.4	1.7	1.7
Squids, cuttlefishes	1.2	1.8	3.8	4.0	3.8
Whale meat	1.6	1.0	1.1	1.1	0.9
Others	5.9	5.8	5.8	4.5	4.2
Others	308.2	314.5	352.2	351.4	337.5
Canned 4)					
Total	382,465	405,450	406,305	397,532	448,415
(Actual number of cases)	(35,882)	(38,540)	(37,442)	(36,688)	(41,838)
Shellfish	15,079	12,699	11,248	12,171	12,521
Crabs	2,799	2,250	2,849	3,363	4,784
Jack mackerel	158	37	-	-	-
Mackerels	184,582	211,074	222,138	203,803	235,932
Prawns, shrimps	21	40	32	53	71
Salmons, trouts	24,308	17,813	1,656	4,814	8,284
Sardines, anchovies	35,217	45,506	51,134	53,957	67,575
Saury	7,062	9,691	10,629	8,043	7,306
Squids, cuttlefishes	3,993	3,577	3,635	3,340	4,041
Tunas, skipjack	93,229	84,276	87,563	95,130	94,520
Whale	10,866	10,989	9,677	7,620	7,833
Others	5,151	7,498	5,744	5,238	5,548

Notes : 1) Excluding dried seaweeds.

2) Baked products of kneaded fish meat with seasonings.

3) Steamed products of kneaded fish meat with seasonings.

4) Surveyed by the Cannery Association of Japan.

III — 5 VALUE OF IMPORTS AND EXPORTS

Imports

Year	Total	Live	Fresh and frozen			Salted dried and smoked
			Shrimps	Skipjack, tunas and marlins	Others	
1970	114,628	5,851	49,329	9,070	18,698	12,478
1971	153,345	7,779	73,335	11,538	32,832	13,838
1972	190,338	12,418	89,918	10,422	36,754	22,878
1973	300,074	17,752	118,207	14,171	71,137	42,059
1974	323,240	19,862	117,571	21,684	90,242	40,052
1975	385,529	24,862	137,517	39,527	107,412	35,166
1976	563,649	30,680	223,128	46,206	150,745	58,279
1977	657,714	32,437	219,509	68,205	191,668	63,167
1978	676,455	32,132	222,528	46,963	238,577	78,434
1979	930,764	29,126	313,168	69,552	331,739	111,625
1980	764,319	32,023	248,866	59,158	267,176	59,969

Exports

Year	Total	Fresh and Frozen		Salted, dried and smoked		
		Skipjack, tunas and marlins	Others		Jack mackerel and mackerels	Salmons
1970	140,717	13,983	21,573	4,248	19,573	16,181
1971	146,662	13,794	25,487	4,230	23,140	18,796
1972	162,179	17,752	36,629	4,513	23,286	17,196
1973	173,494	21,632	44,688	4,745	26,259	10,419
1974	201,965	24,331	42,714	5,398	35,554	12,993
1975	168,696	3,289	38,357	5,783	35,732	15,102
1976	220,833	13,958	49,288	5,942	34,477	17,625
1977	184,180	12,906	37,389	5,877	44,423	3,723
1978	171,250	13,849	30,654	5,736	35,406	3,144
1979	196,363	10,957	35,175	6,723	35,442	139
1980	265,314	25,064	36,181	8,370	52,830	126

BY COMMODITY, 1970~1980

Unit: Million yen

Raw agar-agar	Fish meals	Pearls	Oil and fat	Prepared	Dried laver	Others
772	6,689	1,474	229	3,561	3,099	3,378
610	1,414	1,315	356	5,721	1,337	3,272
775	3,266	1,550	351	7,384	768	3,854
1,309	8,738	2,175	445	14,784	2,958	6,339
2,142	3,404	2,158	569	18,934	59	6,563
1,748	5,856	3,147	904	22,884	221	6,285
2,153	5,485	4,871	665	30,660	42	10,735
1,596	24,827	6,079	452	32,182	264	12,328
1,759	9,341	7,839	1,252	28,042	-	9,588
2,386	9,773	8,996	1,371	38,717	-	14,311
3,700	17,251	13,828	1,523	41,791	-	19,034

Unit: Million yen

Canned				Oil and fat		Pearls	Others
Sardines and anchovies	Tunas	Crabs	Others	Whale oil	Others		
79	28,862	2,929	5,552	2,597	1,307	14,725	9,110
99	23,016	3,966	5,218	4,681	2,431	12,599	9,205
338	27,091	1,724	5,875	1,555	1,893	14,189	10,138
712	24,440	315	5,072	1,693	3,048	17,867	12,604
834	29,119	644	5,627	3,930	11,268	17,484	12,069
1,343	27,664	454	3,646	1,959	5,481	17,679	12,207
7,536	35,932	890	4,367	1,447	7,696	22,920	19,355
8,227	25,626	581	3,784	1,412	12,059	10,296	17,877
7,951	25,007	62	3,654	522	17,665	8,818	18,782
10,164	26,536	25	3,233	-	15,910	32,090	19,969
13,179	35,461	59	3,450	-	13,809	51,392	25,337

III — 6 VALUE OF IMPORTS AND

Imports

Year	Total	U. S. A.	Republic of Korea	Taiwan	Canada	Indonesia	India
		1	2	3	4	5	6
1970	114,628	8,700	14,203	9,151	1,846	3,791	5,317
1971	153,345	10,236	17,327	13,324	3,396	8,336	8,601
1972	190,338	7,570	24,623	17,322	7,310	14,992	12,358
1973	300,074	24,243	42,273	25,338	17,401	22,235	17,750
1974	323,240	16,326	62,763	28,746	14,167	24,504	17,391
1975	385,529	21,768	85,639	44,186	13,363	29,513	27,847
1976	563,649	28,441	115,752	54,625	27,547	48,431	40,984
1977	657,714	62,310	129,344	67,545	44,879	48,802	35,229
1978	676,455	104,710	100,497	66,459	53,974	47,024	36,340
1979	930,764	143,769	132,817	80,065	59,620	60,345	55,978
1980	764,319	98,963	116,568	79,868	29,214	54,101	44,436

Exports

Year	Total	U. S. A.	Netherlands	Nigeria	Taiwan	Hong Kong	Papua New Guinea
		1	2	3	4	5	6
1970	140,717	41,951	4,982	34	1,830	4,123	1,177
1971	146,662	40,107	6,985	134	2,071	3,011	1,356
1972	162,179	59,753	4,992	507	2,996	4,053	1,478
1973	173,494	61,664	4,088	386	5,939	4,662	2,325
1974	201,965	62,373	14,400	1,176	5,841	4,378	3,157
1975	168,696	38,142	9,935	3,851	8,363	5,290	2,697
1976	220,833	57,042	11,972	4,718	11,969	7,403	4,623
1977	184,180	39,447	14,171	11,117	9,500	7,636	4,709
1978	171,250	33,574	18,813	14,785	11,266	7,833	6,368
1979	196,363	36,122	15,076	12,158	11,723	10,539	4,693
1980	265,314	54,175	12,126	16,287	9,862	17,559	5,789

EXPORTS BY COUNTRY, 1970~1980

Unit: Million yen

China	Spain	Australia	Thailand	Hong Kong	Mexico	U. S. S. R.	Malaysia	Others
7	8	9	10	11	12	13	14	15
10,815	2,519	5,779	5,651	3,819	7,355	3,238	2,766	29,678
11,049	9,332	7,206	7,902	5,651	7,856	2,936	5,063	35,130
15,261	8,763	8,516	10,295	5,485	7,102	2,481	6,158	42,102
20,824	9,444	10,795	14,082	5,879	12,323	6,067	8,122	63,298
29,020	17,872	11,179	12,901	7,069	7,075	10,307	5,827	58,093
22,651	19,655	11,235	20,934	8,743	7,891	8,383	6,236	57,385
24,750	27,844	21,160	28,846	15,257	13,516	10,947	15,122	90,427
19,962	19,754	25,496	23,733	18,981	10,213	14,662	15,647	121,157
32,489	24,701	24,328	24,305	16,530	14,877	13,978	11,537	104,706
43,252	43,260	41,503	38,447	19,116	12,642	16,241	18,864	164,845
49,433	38,410	28,391	29,034	14,710	8,955	15,946	10,488	145,802

Unit: Million yen

Canada	United Kingdom	Australia	Singapore	Saudi Arabia	Philippines	S. Africa	Switzerland	Others
7	8	9	10	11	12	13	14	15
3,932	16,835	5,322	5,220	192	5,760	1,311	3,735	39,247
4,833	15,761	4,971	2,834	146	6,549	1,428	3,507	47,216
5,963	12,622	4,741	2,328	373	5,200	1,175	4,553	44,662
7,437	10,520	5,363	3,463	902	5,301	1,973	6,146	46,826
7,151	10,983	8,383	3,618	1,406	8,316	3,091	4,729	57,764
6,843	12,354	5,227	5,428	1,713	7,770	2,881	4,668	48,939
8,831	14,877	8,747	3,798	2,287	8,300	4,097	6,204	59,030
6,033	4,850	5,862	4,763	4,491	5,897	3,989	3,864	62,150
5,766	5,056	3,985	3,920	3,300	3,179	2,979	2,583	47,843
6,968	6,235	3,924	3,519	3,273	3,789	2,967	8,265	67,112
7,184	7,389	4,856	5,606	7,032	6,165	5,759	12,747	92,778

III — 7 VALUE OF IMPORTS AND EXPORTS (by Country, and by Commodity)

Imports

Country of origin		Total	Live	Fresh and			
				Shrimps	Squids & cuttlefish	Octopuses	Skipjack, tunas and marlins
Total		764,319	32,023	248,866	47,995	44,229	59,158
Republic of Korea	1	116,568	4,687	3,712	9,819	5,133	29,288
U.S.A	2	98,963	290	70	445	—	965
Taiwan	3	79,868	24,005	5,901	1,644	50	20,780
Indonesia	4	54,101	—	49,693	114	—	215
China	5	49,433	849	30,770	102	16	7
India	6	44,436	—	43,780	547	—	—
Spain	7	38,410	—	0	7,093	27,821	535
Canada	8	29,214	26	1,019	4,694	—	448
Thailand	9	29,034	406	15,166	5,922	848	—
Australia	10	28,391	348	19,625	—	15	114
U.S.S.R.	11	15,946	0	329	—	—	—
Chile	12	15,044	—	—	6	—	—
Hong Kong	13	14,710	482	7,372	923	3	5
Malaysia	14	10,488	1	8,503	335	4	0

Exports

Country of destination		Total	Fresh and frozen products	Salted dried and smoked		
					Mackerels	Salmons
Total		265,314	61,301	8,370	52,830	126
U.S.A	1	54,175	22,197	1,433	200	3
Hong Kong	2	17,559	446	3,002	87	—
Nigeria	3	16,287	167	7	16,055	0
West Germany	4	13,623	682	19	21	—
Switzerland	5	12,747	28	2	—	—
Netherland	6	12,126	180	20	175	—
Taiwan	7	9,862	331	1,613	—	18
United Kingdom	8	7,389	357	26	236	9
Italy	9	7,297	5,683	8	259	—
Canada	10	7,184	1,451	77	147	—

OF FISHERY PRODUCTS, 1980

Unit: Million yen

frozen			Salted dried and smoked	Raw agar- agar	Fish meals	Pearls	Oil and fat	Prepared	Others
Salmons & trouts	Crabs	Others							
31,853	32,261	110,838	59,969	1,998	17,251	13,828	1,523	41,791	20,736
11	3,326	34,099	7,322	1,045	299	-	4	6,947	10,376
27,496	26,773	12,206	27,017	47	45	627	-	1,532	1,450
-	38	4,104	873	126	-	5	48	21,923	311
-	-	31	1,865	-	-	976	12	540	703
-	510	4,436	3,871	5	-	5,596	-	2,309	962
-	-	14	2	-	9	118	-	4	12
-	-	2,406	102	124	-	-	195	134	0
3,003	183	8,241	11,392	-	33	-	-	169	6
-	12	1,960	2,828	-	120	13	-	1,732	27
-	0	2,337	21	-	-	4,309	-	1,605	17
854	660	12,683	414	-	985	-	138	882	1
-	-	5,376	-	-	-	-	-	-	8,704
-	57	4,925	112	-	-	741	-	49	41
-	1	63	1,331	-	-	110	-	136	4

Unit: Million yen

Canned products				Oil and fat	Peals	Others
Sardines and anchovies	Tunas	Crab	Others			
13,179	17,341	59	21,570	13,809	51,392	25,337
532	6,359	41	1,365	255	14,120	3,100
280	19	3	207	3	5,802	7,503
2	16	1	36	191	-	3
-	292	-	511	607	11,101	390
41	1,438	1	1,302	-	9,739	190
198	58	-	48	10,904	418	125
-	23	2	39	191	7	7,638
1,188	38	-	3,530	1,083	696	226
-	34	-	40	1	827	445
6	2,624	-	2,126	14	929	376

III - 8 FOOD BALANCE SHEET ON

Description	1976	1977	1978	1979	1980
(FISH AND SHELLFISH)					
(Live weight base)					
Domestic production	9,990	10,126	10,186	9,948	10,396
For domestic consumption	8,961	9,274	9,289	8,933	9,373
Fresh and frozen	2,353	2,412	1,999	1,813	2,148
Dried, salted and smoked ..	1,734	1,830	2,040	2,008	2,181
Kneaded	2,403	2,259	2,164	1,971	1,858
Fish sausage	169	173	166	149	120
Canned	238	333	265	280	342
Feeds	2,064	2,267	2,655	2,712	2,724
For exports	1,029	852	1,046	1,015	1,023
Fresh and frozen	236	196	202	194	202
Canned	549	466	530	535	603
Others for food use	11	9	8	9	12
Feeds	233	181	306	277	206
Change in stock	...	742	Δ 82	Δ 94	358
For food use	...	441	Δ 38	Δ 86	Δ 30
For feeds	...	301	Δ 44	Δ 8	391
Imports	1,136	1,848	1,479	1,706	1,689
For food use	866	999	1,082	1,234	1,027
For feeds	270	849	397	472	662
Domestic supply	10,097	10,380	10,850	10,736	10,704
For food use	7,763	7,565	7,754	7,546	7,709
Domestic production	6,897	6,566	6,672	6,311	6,682
Imports	866	999	1,082	1,235	1,027
For feeds	2,334	2,815	3,096	3,190	2,995
Domestic production	2,064	1,966	2,699	2,798	2,333
Imports	270	849	397	472	662

FISHERY PRODUCTS, 1976~1980

Unit: Thousand metric tons

Description	1976	1977	1978	1979	1980
(WHALE)					
Domestic production	44	42	24	19	19
For domestic consumption	44	42	24	19	19
For exports	0	0	0	0	0
Imports	32	37	34	27	25
Domestic supply	76	79	58	46	44
For food use	76	79	58	46	44
For feeds	-	-	-	-	-
(SEAWEED) (dried weight base)					
Domestic production	133	128	128	129	139
For domestic consumption	129	123	124	123	133
For exports	4	5	4	5	6
Imports	47	48	43	49	55
Domestic supply	176	171	166	174	188
For food use	147	142	134	143	157
For feeds	29	29	32	31	31
Per capita food supply (unit : kgs)					
Fish and shellfishes	68.6	66.3	67.2	65.0	65.9
Whales	0.7	0.7	0.5	0.4	0.4
Seaweeds	1.3	1.2	1.2	1.2	1.3
Population (Unit: Million persons) 1).....	113	114	115	116	117

Note: 1) Data are based on the surveys undertaken as of October 1st of the year.

III — 9 AVERAGE CONSUMPTION IN QUANTITY OF FISHERY

1) Workers household(Cities With population of 50,000 and over)

Unit: gram

Item	1976	1977	1978	1979	1980
Fresh and frozen					
Cod, Alaska pollack	949	752	732	732	774
Flounders, halibuts	2,879	2,765	2,641	2,653	2,754
Jack mackerel	3,338	2,577	2,211	2,390	2,122
Mackerels	2,935	3,231	3,170	2,740	2,806
Salmons, trouts	1,406	1,070	992	943	1,056
Sardines, anchovies	2,510	3,014	2,498	2,235	2,285
Saury	1,616	1,389	2,158	2,479	2,177
Sea breams	1,123	1,041	1,100	1,139	1,013
Shellfishes	5,845	5,799	5,775	5,673	5,400
Shrimp, prawn, crab	4,046	3,671	4,131	3,903	3,855
Skipjack	1,359	1,190	1,348	1,289	1,159
Squids, cuttlefishes	6,729	6,322	6,154	6,365	7,522
Tunas, marlins	3,573	3,498	3,925	3,617	3,540
Yellowtail	2,356	2,053	2,282	2,566	2,433
Others	16,415	15,187	15,138	16,471	14,617
Processed fishery products					
Boiled and dried anchovies .	649	628	647	609	687
Canned (case)	12.87	13.10	14.33	14.96	14.08
Cured	562	530	482	---	---
Dried anchovies	869	947	853	811	797
Dried jack mackerel	1,598	1,330	1,328	1,416	1,415
Dried "Kombu" and "Wakame" kelp	2,261	2,382	2,436	2,482	2,622
Dried squids	246	206	184	167	185
Fish sausage	2,196	2,848	2,467	2,451	1,866
Kneaded	---	---	---	---	---
Salted salmons and trouts .	3,457	3,229	3,245	3,329	3,716
Others	---	---	---	---	---
Whale meat	890	772	572	520	513
Beef	8,560	8,903	9,946	10,103	9,639
Pork	19,553	20,143	20,298	20,986	21,357
Chicken	11,997	12,286	13,210	14,111	14,440
Ham, sausage	7,992	7,705	8,007	8,212	8,666
Milk, eggs	---	---	---	---	---
Seasonings	541	523	463	451	404
Expense for dining out.....	---	---	---	---	---
Number of family members ...	3.80	3.78	3.77	3.80	3.78

PRODUCTS PER HOUSEHOLD, 1976~1980

(2) Farm household

Unit: gram

Item	1976	1977	1978	1979	1980
Fishery products					
Fresh and frozen					
Cod, Alaska pollack	2,430	2,250	2,110	2,200	2,540
Flounders, halibuts	3,330	3,090	2,710	2,930	2,960
Jack mackerel	3,170	2,660	2,400	2,470	2,060
Mackerels	8,870	9,850	8,720	8,090	9,430
Salmons, trouts	---	---	---	---	---
Sardines, anchovies	6,170	7,250	5,530	5,520	6,050
Saury	2,550	2,420	3,510	4,170	4,160
Sea breams	710	850	870	890	940
Shellfishes	4,640	5,140	5,200	4,700	4,730
Shrimp, prawn, crab	2,220	2,140	2,370	2,340	2,590
Skipjack	3,590	3,630	4,160	3,950	3,850
Squids, cuttlefishes	7,350	6,960	6,710	7,120	8,660
Tunas, marlins	3,570	3,780	3,950	4,030	4,240
Yellowtail	2,390	2,230	2,390	3,230	3,080
Others	---	---	---	---	4,730
Processed fishery products					
Boiled and dried	2,560	2,590	2,530	2,650	2,670
Canned	4,010	4,160	3,920	3,930	3,850
Cured	390	840	850	860	860
Dried "nori"	---	---	---	---	---
Dried "kombu" and "wakame" Kelp	2,220	2,260	2,140	2,310	2,500
Dried squids	500	520	540	570	750
Fish sausage	3,190	2,460	1,650	1,580	1,540
Kneaded	12,000	11,380	10,650	10,260	10,700
Salted salmons and trouts	3,990	3,590	3,260	3,780	4,320
Others	---	---	---	---	---
Whale meat	1,160	---	---	---	---
Beef	4,100	4,640	5,090	5,150	5,020
Pork	13,650	14,170	14,540	16,600	16,220
Chicken	10,810	11,580	11,890	12,810	13,130
Ham, sausage	4,680	6,780	6,360	6,860	---
Milk, eggs	---	---	---	---	---
Seasonings	1,010	1,130	1,100	1,170	1,080
Expense for dining out	---	---	---	---	---
Number of family members	4.52	4.49	4.48	4.45	4.40

III — 10 AVERAGE CONSUMPTION IN VALUE OF FISHERY

(1) Workers household (Cities With population of 50,000 and over)

Unit: yen

Item	1976	1977	1978	1979	1980
Net income	3,121,176	3,418,882	3,672,984	3,963,132	4,196,232
Food expense	732,876	775,067	807,652	836,881	886,159
Fishery products	114,666	122,292	128,373	132,758	138,298
Fresh and frozen	61,095	64,096	67,118	69,477	72,278
Cod, Alaska pollack	605	497	512	518	572
Flounders, halibuts	2,625	2,870	2,995	3,137	3,398
Jack mackerel	2,956	2,814	2,495	2,756	2,667
Mackerels	1,202	1,480	1,357	1,226	1,371
Salmons, trouts	1,616	1,458	1,415	1,413	1,586
Sardines, anchovies	917	1,153	916	837	931
Saury	1,168	1,369	1,692	1,634	1,518
Sea breams	1,828	1,862	2,114	2,257	2,289
Shellfishes	4,573	5,173	5,332	5,381	5,684
Shrimp, prawn, crab	7,129	7,297	8,305	8,614	8,959
Skipjack	1,719	1,774	1,784	1,874	1,895
Squids, cuttlefishes	6,038	6,529	6,608	6,871	7,268
Tunas, marlins	7,625	8,130	8,790	8,768	9,308
Yellowtail	4,598	4,497	4,974	5,382	5,358
Others	16,496	17,192	17,829	11,354	19,474
Processed fishery products ..	52,521	57,169	60,420	62,483	65,187
Boiled and dried anchovies ..	758	754	810	793	907
Canned	2,261	2,544	2,716	2,734	2,832
Cured	1,363	1,447	1,415	1,456	1,452
Dried "nori"	4,608	4,633	5,067	5,547	5,797
Dried "Kombu" and "Wakame" Kelp	2,312	2,299	2,285	2,387	2,763
Dried squids	602	583	578	606	632
Fish sausage	1,311	1,941	1,709	1,682	1,286
Kneaded	9,693	10,596	11,345	11,484	11,254
Salted salmons and trouts ..	5,501	6,016	6,634	6,896	7,406
Others	24,112	25,356	27,861	28,898	30,858
Whale meat	1,050	1,027	835	798	833
Beef	23,304	24,627	27,675	28,904	30,116
Pork	29,612	29,643	29,429	29,090	29,596
Chicken	13,479	13,767	13,529	13,762	14,405
Ham, sausage	11,710	11,967	12,619	13,137	14,385
Milk, eggs	42,031	43,079	41,543	42,661	44,895
Seasonings	1,105	1,070	998	975	934
Expense for dining out	93,208	103,909	114,408	126,467	134,092
Number of family members ...	3.80	3.78	3.77	3.80	3.78

PRODUCTS PER HOUSEHOLD, 1976~1980

(2) Farm household

Unit: yen

Item	1976	1977	1978	1979	1980
Net income	3,662,000	3,984,500	4,221,100	4,417,700	4,515,200
Food expense	747,600	798,400	828,500	855,100	903,500
Fishery products	110,073	119,659	123,372	127,855	141,749
Fresh and frozen	59,209	68,089	70,689	74,641	78,659
Cod, Alaska pollack	1,234	1,421	1,416	1,494	1,836
Flounders, halibuts	2,561	2,901	2,832	3,034	3,465
Jack mackerel	2,316	2,348	2,336	2,530	2,308
Mackerels	3,172	3,862	3,257	3,234	3,751
Salmons, trouts	---	---	---	---	---
Sardines, anchovies	1,762	2,096	1,558	1,633	1,772
Saury	1,434	1,765	2,336	2,430	2,444
Sea breams	1,350	1,792	1,841	1,965	2,186
Shellfishes	2,107	2,729	3,009	2,942	3,101
Shrimp, prawn, crab	3,508	4,007	4,602	4,901	5,651
Skipjack	2,891	3,493	3,611	3,599	3,830
Squids, cuttlefishes	6,271	6,841	6,933	7,656	8,867
Tunas, marlins	7,730	8,801	9,416	9,708	10,818
Yellowtail	4,154	4,164	4,744	5,551	6,188
Others	18,719	21,869	22,798	23,964	22,442
Processed fishery products..	49,623	52,636	52,653	53,214	63,090
Boiled and dried anchovies .	2,751	2,981	3,131	3,453	3,522
Canned	2,157	2,686	2,502	2,563	2,694
Cured	965	1,718	1,838	2,005	2,086
Dried "nori"	4,333	4,601	4,928	5,126	5,602
Dried "Kombu"and"Wakame"kelp	3,088	3,211	3,203	3,380	3,880
Dried squids	1,426	1,511	1,735	1,919	2,479
Fish sausage	1,838	1,486	998	1,009	1,007
Kneaded	8,783	8,898	9,498	9,655	10,689
Salted salmons and trouts.	5,304	5,872	5,734	6,686	7,438
Others	19,008	19,672	19,086	19,981	23,693
Whale meat	1,241	---	---	---	---
Beef	10,813	12,145	13,860	14,615	14,947
Pork	18,966	20,384	21,231	21,806	22,328
Chicken	10,450	11,424	11,988	12,182	13,233
Ham, sausage	6,204	7,845	8,253	8,938	9,323
Milk, eggs	37,686	38,286	36,992	38,800	40,790
Seasonings	1,821	2,042	2,120	2,291	2,286
Expense for dining out.....	45,384	51,832	61,310	65,251	73,172
Number of family members ..	4.52	4.49	4.48	4.45	4.40

IV ECONOMY OF FISHERY ESTABLISHMENTS

IV-1 NATIONAL AVERAGE OF FISHERIES
HOUSEHOLD ECONOMY, 1976~1980

Items	Unit	1976	1977	1978	1979	1980
Number of family members	Person	4.5	4.5	4.3	4.3	4.3
Number of non-powered fishing boats used	Boat	0.3	0.3	0.3	0.3	0.3
Number of powered fishing boats used	"	1.0	1.0	1.0	1.0	1.0
Tonnage of powered fishing boats used	Ton	2.4	2.5	2.6	2.7	2.7
Number of fishing days	Day	146	148	151	150	148
Number of workers on the sea	Person	457	468	478	478	474
Working hours on the sea	Hours	2,589	2,591	2,552	2,558	2,502
Catches	kg	9,688	10,871	11,388	9,916	9,605
Price of fish caught	Yen/kg	369	379	358	449	480
Fishery earning	1000 yen	3,675.4	4,195.0	4,158.9	4,528.3	4,695.6
Non-fishery earning	"	378.4	484.7	503.6	458.8	413.8
Non-business earning	"	1,377.5	1,532.7	1,641.7	1,885.4	2,030.8
Fishery expenditure	"	1,611.4	1,874.0	1,895.6	2,135.4	2,258.7
Employees wages	"	347.4	436.0	417.9	454.4	396.1
Maintenance of fishing boats	"	138.0	163.5	158.1	165.4	162.5
Expenditure for fishing gears	"	164.5	198.2	183.1	183.2	179.8
Oil	"	217.5	249.7	254.3	345.7	471.9
Miscellaneous facilities	"	20.9	23.1	18.9	21.9	20.1
Depreciation	"	332.8	360.4	413.1	480.5	508.2
Non-fishery business expenditure	"	189.1	243.1	284.5	243.9	197.7
Non-business expenditure	"	78.2	93.7	114.4	132.6	120.2
Household expenditure	"	2,301.9	2,552.5	2,722.4	2,890.1	3,114.8
Taxes, public charges and obligation	"	254.4	331.8	389.9	443.6	467.3
Income of fishery household	"	3,552.8	4,001.5	4,009.7	4,360.6	4,563.6
Business income	"	2,253.5	2,562.6	2,482.4	2,607.8	2,653.0
Fishery income	"	2,064.1	2,321.0	2,263.3	2,392.9	2,436.9
Non-fishery income	"	189.4	241.6	219.1	214.9	216.1
Non-business income	"	1,299.3	1,438.9	1,527.3	1,752.8	1,910.6
Surplus of fishery household economy	"	996.4	1,117.2	897.4	1,026.9	981.5
Property						
Fixed assets	"	6,196.5	6,721.6	6,980.3	7,660.0	7,921.3
Land	"	1,603.8	665.6	638.9	876.2	886.4
Building	"	3,592.4	3,810.2	3,561.1	3,718.3	3,862.3
Hull of fishing boats	"	708.7	762.0	966.0	1,055.6	1,067.7
Engines of fishing boats	"	656.1	738.6	896.7	1,018.1	1,103.9
Fishing nets and long lines	"	209.0	225.8	246.4	277.1	271.3
Non-fixed assets	"	4,090.7	5,015.5	5,614.4	6,362.8	6,979.8
Debts	"	1,119.4	1,256.1	1,624.5	1,887.4	1,914.1

- Notes: 1) Fishery household in this table refers to the household engaging in fishing with less than 10 tons fishing boat. The data show the average per fishery household.
- 2) Income of fishery household = Fishery income + Non-fishery business income + Non-business income.
Surplus of fishery household economy = Income of fishery household - (Taxes, public charges and obligations + household expenditure)
- 3) Duration of this statistics is for a calendar year. Property is accounted at the beginning of the year.

N-2 NATIONAL AVERAGE OF SMALL AND MIDDLE SIZE FISHERY ENTERPRISE ECONOMY, 1976~1980

Item 1), 2)	Unit	1976	1977	1978	1979	1980
Gross tonnage of fishing boats used	Ton	99.89	98.84	94.81	93.18	93.61
Number of workers on the boat	Person	16	16	15	14	14
Earnings from fishery	1000 yen	118,634	135,329	121,128	124,780	134,152
Fishery expenditures	"	111,520	126,702	120,538	121,091	135,914
Employees wages	"	44,574	51,404	47,080	45,946	47,396
Maintenance of fishing boats ..	"	8,719	9,354	9,257	8,852	8,822
Expenditure for fishing gears .	"	4,596	4,736	4,355	4,230	4,671
Oil	"	15,349	15,408	13,986	17,515	28,159
Bait	"	3,437	4,015	4,165	3,851	3,850
Ice	"	1,222	1,346	1,386	1,308	1,419
Fish container	"	1,837	1,692	1,534	1,598	2,070
Miscellaneous materials	"	1,241	1,368	1,512	1,431	1,428
Miscellaneous facilities	"	273	292	220	232	254
Rents and charge	"	1,866	2,314	2,373	2,463	2,850
Brokerage	"	4,964	5,787	5,082	5,380	5,861
Costs for business	"	5,088	6,189	6,467	6,078	6,372
Tax upon fishery business	"	591	744	1,008	965	915
Other	"	4,157	5,786	5,558	6,205	6,893
Depreciation	"	13,606	16,268	16,555	15,037	14,954
Estimated family wages	"	1,074	1,214	1,343	1,403	1,457
Fishery profit 3)	"	6,040	7,413	Δ 753	2,286	Δ 3,219
Assets (final)	"	127,017	149,556	159,038	160,532	161,269
Fixed assets	"	70,694	76,727	81,428	87,578	91,909
Fixed assets for fishery	"	47,722	52,680	51,770	60,053	62,137
Non-fixed assets	"	56,368	72,829	77,610	72,954	69,360
Liabilities (final)	"	115,109	134,144	143,463	144,472	149,979
Net worth	"	11,908	15,412	15,575	16,060	11,290
Net profit	"	3,927	5,483	2,437	2,275	Δ 2,189
Interest on liabilities	"	6,666	6,361	6,196	6,413	7,604
Sales profit 4)	%	5.1	5.5	Δ 0.6	1.8	Δ 2.4
Costs for physical expenditure ...	1000 yen	66,362	59,235	57,824	59,005	70,990
Added value	"	64,657	76,094	63,304	65,775	63,162
Added value per worker	"	4,041	4,756	4,192	4,568	4,512
Wage per worker	"	2,786	3,213	3,139	3,282	3,385
Capital equipment ratio 5)	"	3,490	3,665	4,089	4,544	5,109
Ratio of net worth out of total capital	%	9.4	10.3	9.8	10.0	7.0
Ratio of profit out of total capital	"	3.2	4.0	1.6	1.4	Δ 1.4

- Notes: 1) Small and middle size fishery enterprise refers to the enterprise engaging in fishery with fishing boats of 10 gross tonnage and over but excluding the big enterprises with capital paid of 100 million yen and over.
- 2) Data show an average per fishery enterprise.
- 3) Fishery profit = Earnings from fishery - fishery expenditures - estimated family wages.
- 4) Sales profit = Fishery profit ÷ earnings from fishery x 100.
- 5) Capital equipment ratio means fixed assets for fishery per worker engaged normally in fisheries.

REFERENCE TABLES

1 CATCH BY COUNTRY OF THE WORLD, 1975~1979

Unit: Thousand metric tons

Country	1975	1976	1977	1978	1979
Total	68,814	72,217	72,104	73,645	74,364
Japan	10,523	10,660	10,762	10,522	10,596
U.S.S.R.	9,975	10,134	9,352	8,930	9,129
China	5,234	5,255	5,852	5,953	5,598
U.S.A.	3,000	3,209	3,141	3,578	3,671
Peru	3,448	4,345	2,537	3,369	3,683
Norway	2,542	3,416	3,541	2,708	2,758
India	2,266	2,174	2,312	2,306	2,343
Republic of Korea	2,134	2,405	2,419	2,351	2,420
Thailand	1,553	1,660	2,190	2,096	1,718
Denmark	1,767	1,912	1,806	1,740	1,738
Chile	929	1,409	1,349	1,959	2,663
Indonesia	1,390	1,483	1,572	1,648	1,737
Korea D.P.R.P.....	1,050	1,120	1,190	1,260	1,330
Iceland	996	992	1,378	1,579	1,661
Philippin	1,443	1,393	1,509	1,580	1,582
Canada	1,033	1,133	1,270	1,401	1,366
Spain	1,518	1,475	1,394	1,380	1,212
Viet Nam	1,014	1,014	1,014	1,014	1,014
Brazil	753	653	748	803	843
France	806	806	760	814	770
Mexico	499	572	670	739	923
Bangladesh	823	826	835	640	640
South Africa	646	638	605	626	673
Poland	801	750	655	571	601
Malaysia	474	517	619	685	698
England and Wales	497	520	525	548	494
Burma	485	502	519	541	565
Argentina	229	281	392	542	589
Nigeria	466	497	504	519	535
Scotland.....	442	476	445	456	383
Ecuador	222	298	434	617	644

2 CATCH BY SPECIES OF THE WORLD, 1975~1979

Unit: Thousand metric tons

	1975	1976	1977	1978	1979
Total	68,814	72,217	72,104	73,645	73,364
Carps, barbels and other cyprinids	557	567	577	583	599
Tilapias and other cichlids.....	279	293	351	369	368
Miscellaneous freshwater fishes...	5,318	5,087	5,148	4,865	5,101
Sturgeons, padolefishes, etc.	28	31	32	28	29
River eels	57	67	70	75	85
Salmons, trouts, smelts, etc.	552	556	632	623	750
Shads, milkfishes, etc.	750	766	768	813	835
Miscellaneous diadromous fishes ..	149	122	144	143	149
Flounders, halibuts, soles, etc. .	1,158	1,136	1,084	1,257	1,148
Cods, hakes, haddocks, etc.	11,858	12,130	10,595	10,409	10,589
Redfishes, bases, congers, etc. ..	5,213	5,143	5,716	5,596	5,295
Jacks, mullets, sauries, etc.	5,885	7,277	8,710	8,094	7,855
Herrings, sardines, anchovies etc.	13,763	15,249	12,899	14,350	15,642
Tunas, bonitos, billfishes, etc. .	2,099	2,323	2,391	2,516	2,421
Mackerels, sneks, cutlassfishes, etc.	4,167	3,842	4,080	4,765	4,516
Sharks, rays, chimaeras, etc.	595	556	563	590	567
Miscellaneous marine fishes	7,353	7,689	7,744	7,619	7,098
Freshwater crustaceans	93	84	80	86	84
Sea-spiders, crabs, etc.	754	672	693	767	824
Lobsters, spiny-rock lobsters, etc.	95	98	97	106	111
Squat-lobsters, nephrops, etc.	77	106	88	85	74
Shrimps, prawns, etc.	1,332	1,500	1,672	1,648	1,526
Krill, planktonic crustaceans, etc. .	40	3	123	143	386
Miscellaneous marine crustaceans..	60	53	56	50	60
Freshwater molluscs	81	150	161	203	255
Abalones, winkles, conchs, etc. .	67	66	72	73	71
Oysters	848	904	860	899	873
Mussels	523	541	619	566	581
Scallops, pectens, etc.	291	323	406	429	397
Clams, cockles, arkshells, etc. ..	936	1,032	1,132	1,117	1,084
Squids, cuttlefishes, octopuses, etc.	1,187	1,209	1,233	1,342	1,558
Miscellaneous marine molluscs	187	167	151	143	157
Porpoises, dolphins, etc.	3	4	4	3	3
Miscellaneous aquatic mammals	187	167	151	143	157
Frogs and other amphibians	1	1	1	1	1
Turtles and other reptiles	8	7	7	10	7
Sea-quirts and other tunicates ...	8	8	7	6	4
Horseshoe crabs and other arachnoids	0	1	0	0	0
Sea-urchins, sea-cucumbers, etc....	40	59	61	62	68
Miscellaneous aquatic invertebrates	19	40	101	75	74
Pearls, mother-of-pearl, shells, etc.	6	6	8	6	6
Corals	0	0	0	0	0
Sponges	0	0	0	0	0
Aquatic bird guano, eggs, etc.	36	4	39	34	37
Brown seaweeds	1,746	1,767	2,307	2,346	2,244
Red seaweeds	487	491	527	662	736
Green seaweeds and other algae ...	2	3	2	3	3
Miscellaneous aquatic plants	92	87	97	86	94

APPENDIX

ILLUSTRATION OF TYPES OF FISHERIES

1. Mother Ship Type Whaling

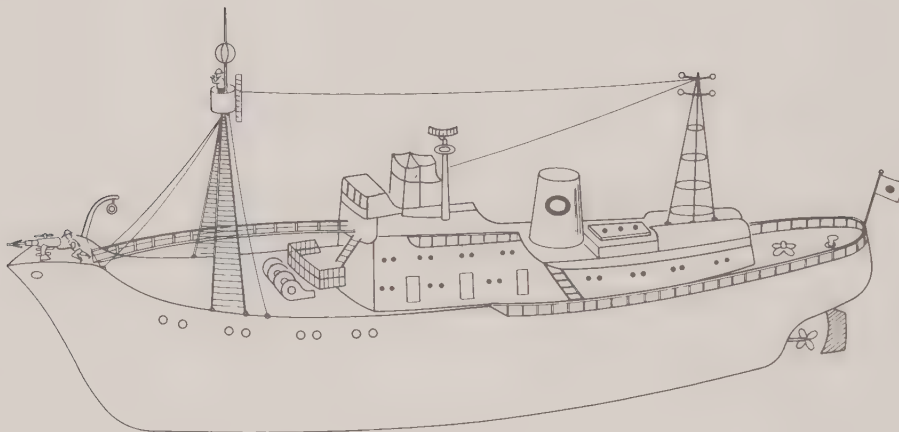
Catcher boat



Mother ship



Catcher boat

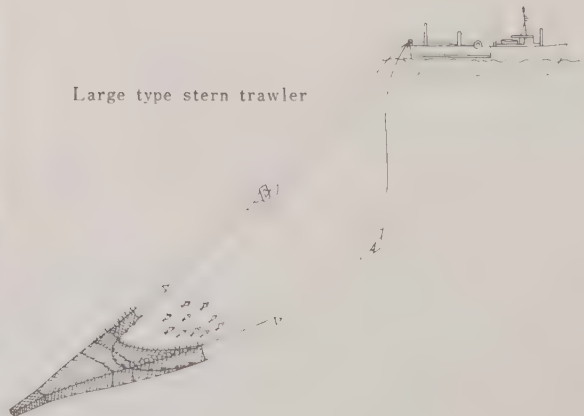


2. Distant Water Trawl

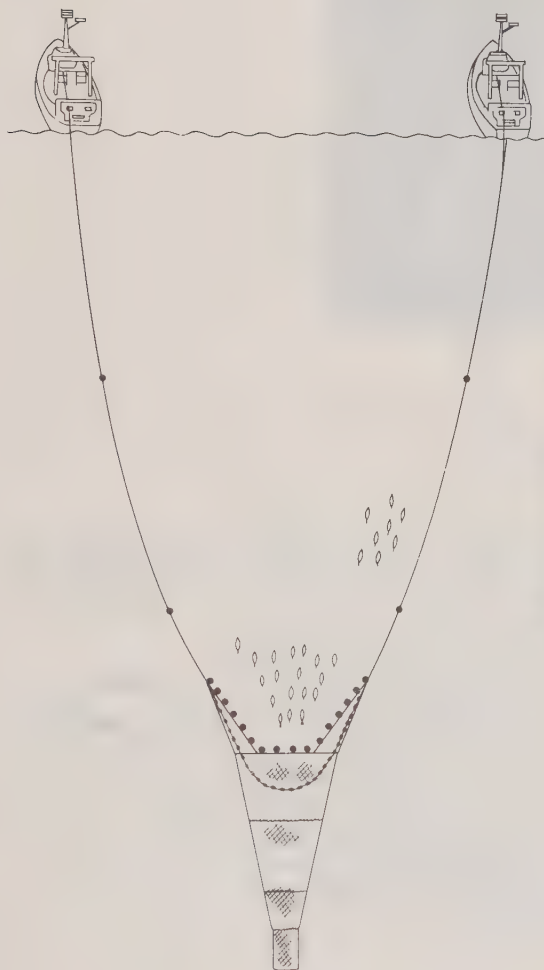
1500 Tonnage type stern trawler



Large type stern trawler



3. Large Trawl in East China Sea



4. Medium Trawl



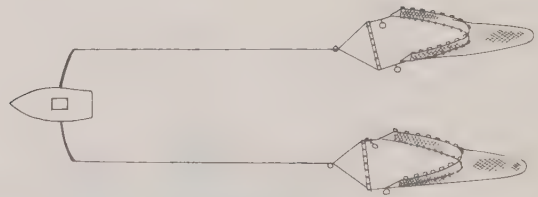
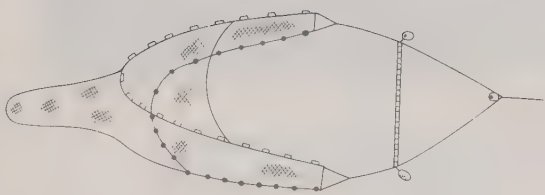
124 Tonnage type stern trawler



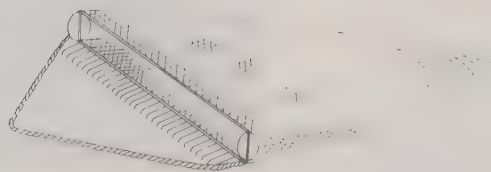
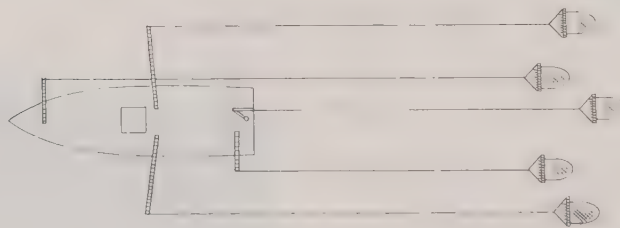
5. Small Trawl



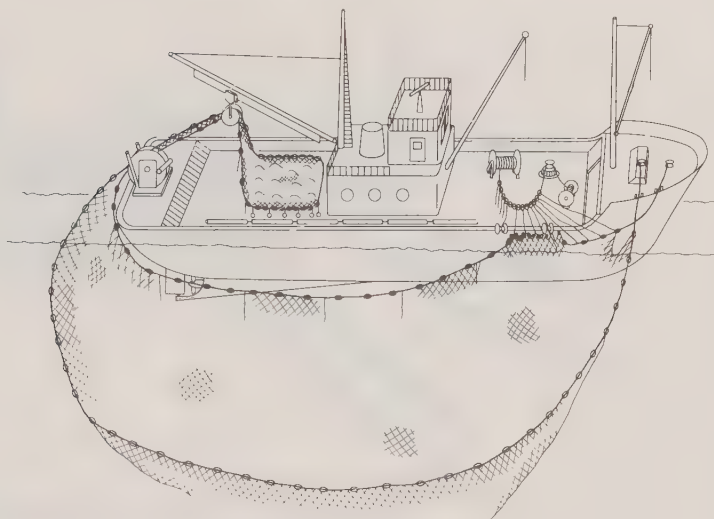
Small trawler for shrimps



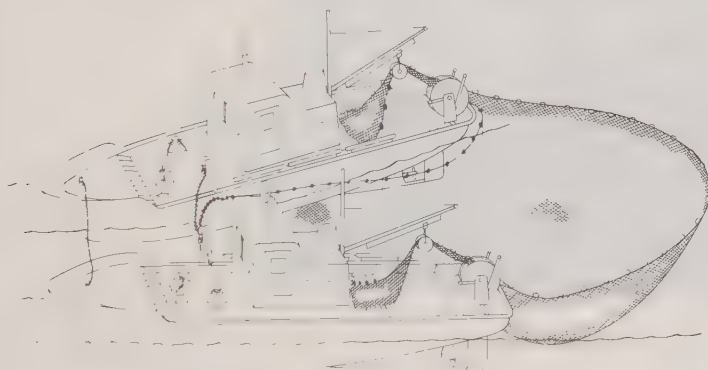
6. Small Trawl With Drag Nets for Scalop



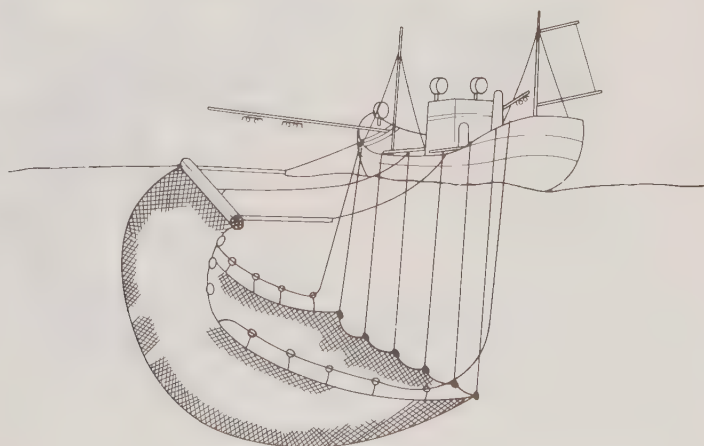
7. Purse Seine (One Boat Operation)



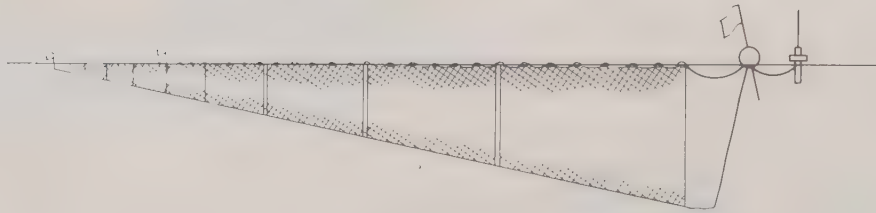
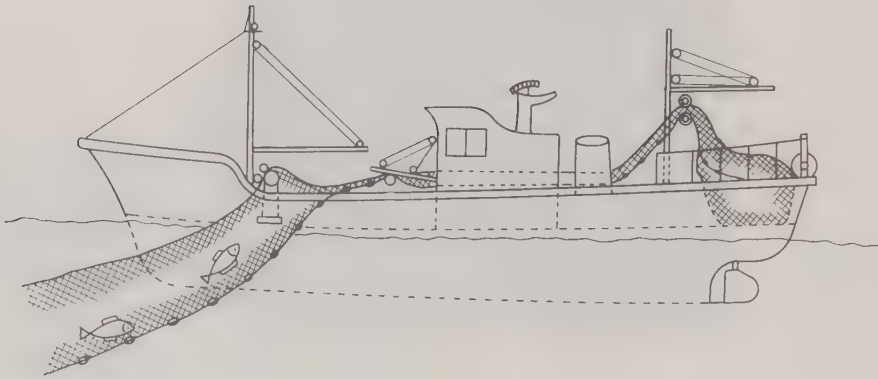
8. Purse Seine (Two Boats Operation)



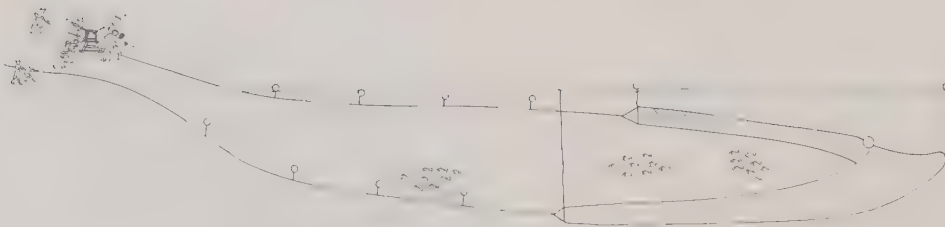
9. Saury Stick-Held-Dip Net



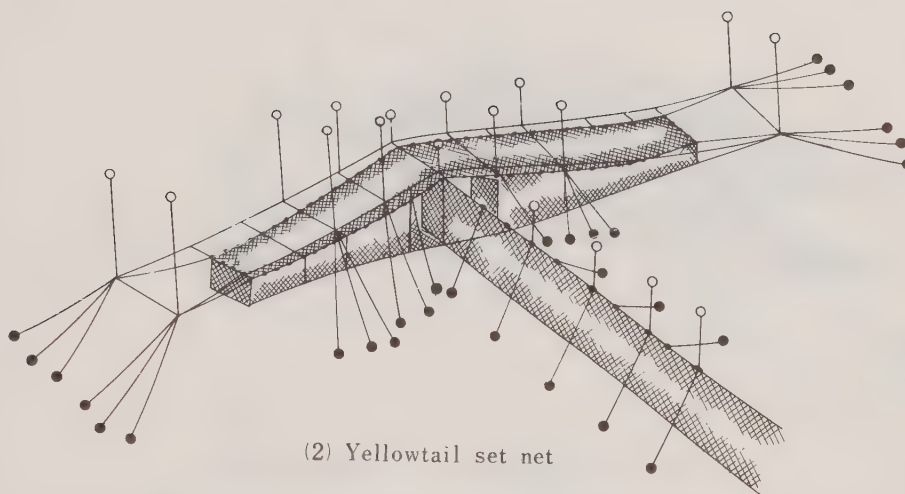
10. Salmon Drift Gill Net



11. Beach Seine



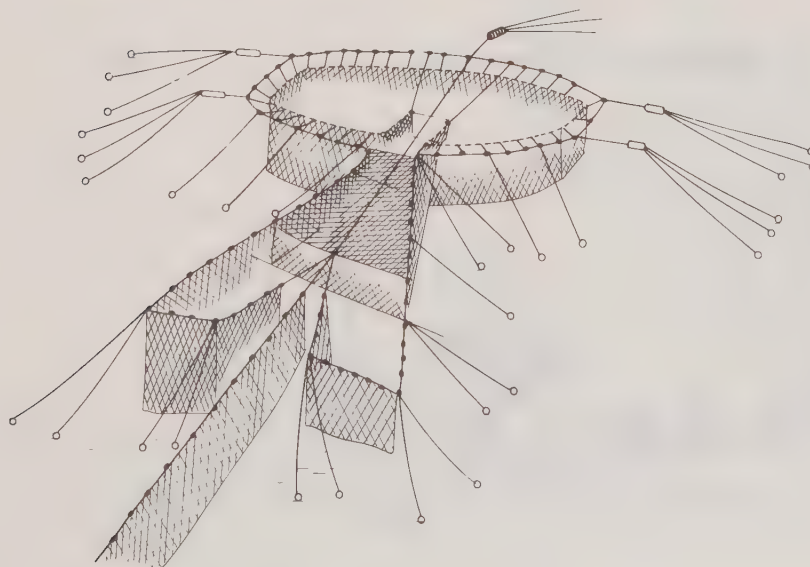
(1) Salmon set net



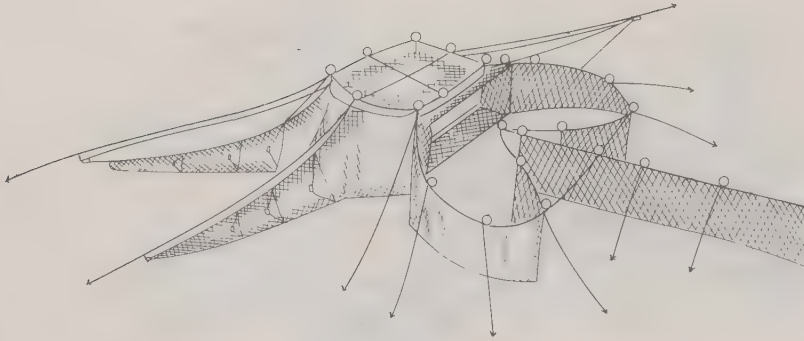
(2) Yellowtail set net



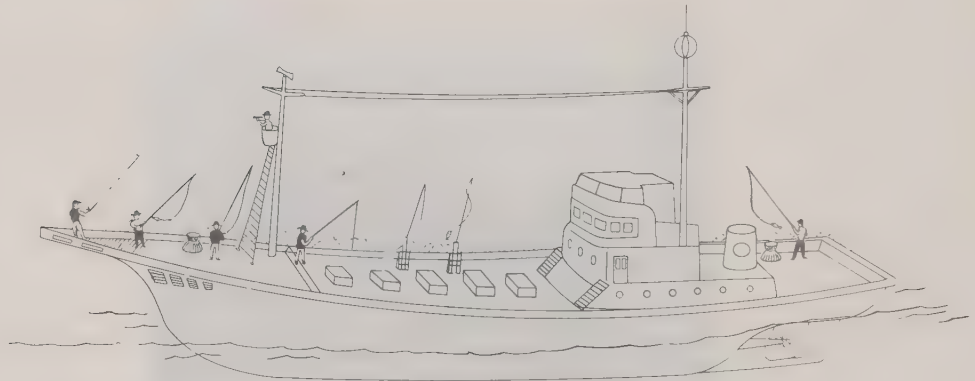
(3) Sardine set net



12. Small Set Net



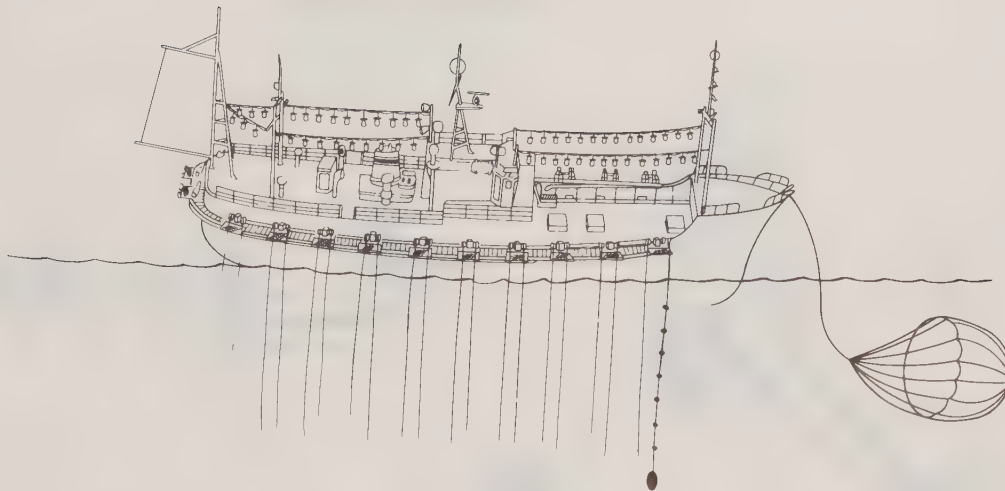
13. Skipjack Pole-and-Line



14. Mackerel Pole-and-Line



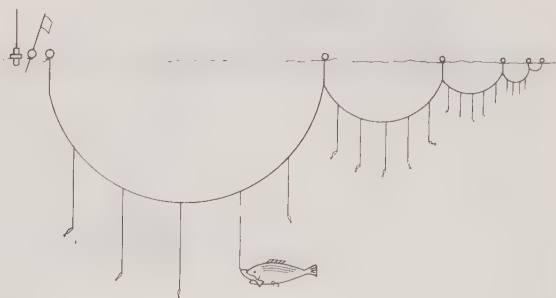
15. Squid Angling



16. Other Angling (Trolling)



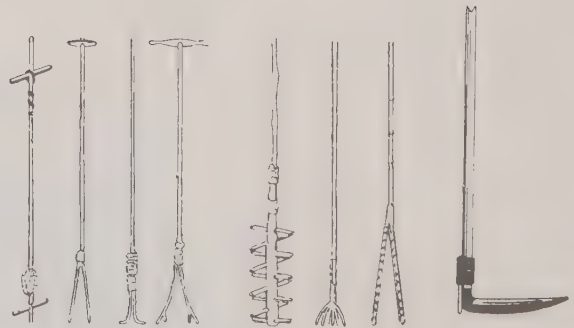
17. Tuna Long Line



18. Shellfish Collecting

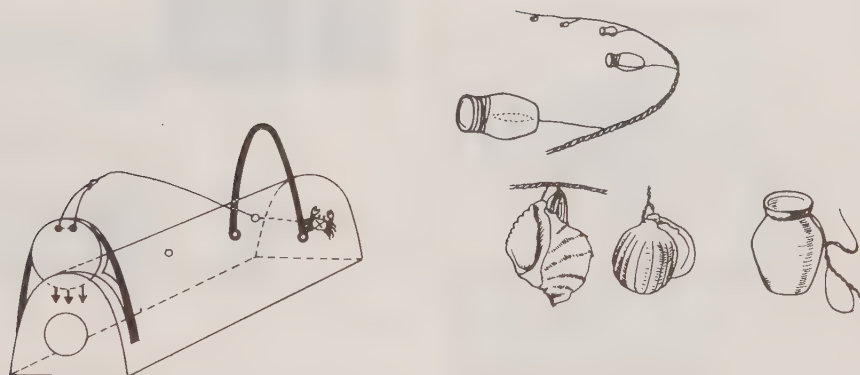


19. Seaweed Collecting

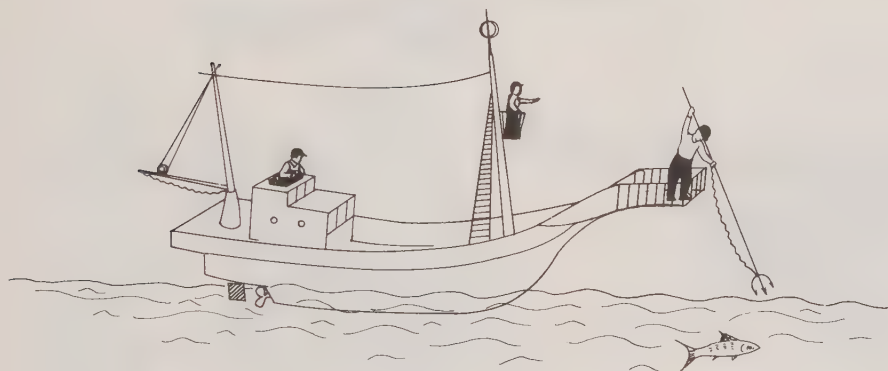


20. Other Fisheries

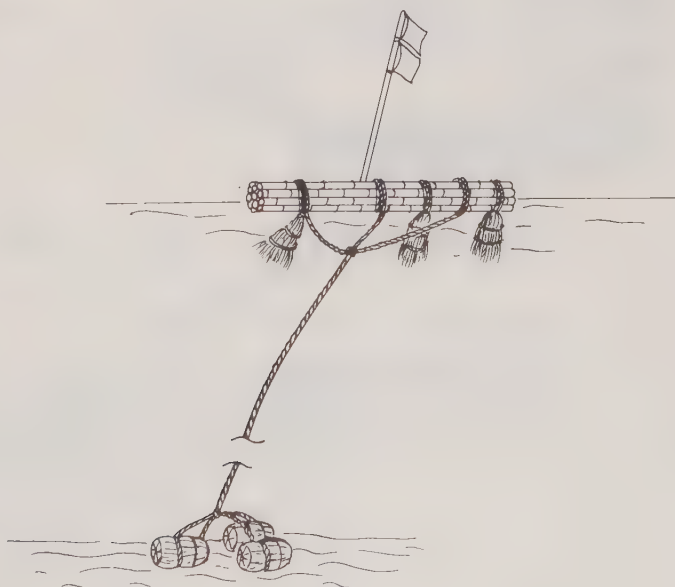
(1) Traps for octopus



(2) Dart

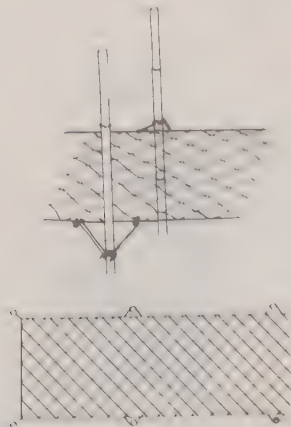


(3) "Tuke" luring fishery

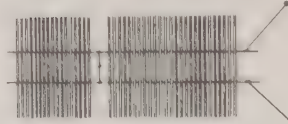


21. "Nori" Laver Culture

"Nori" laver culture by stakes



Spore collector with bamboo screen

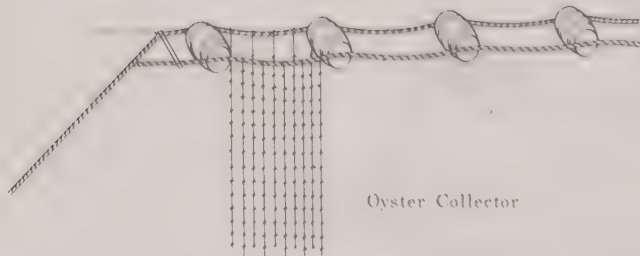


"Nori" laver culture by floating nets

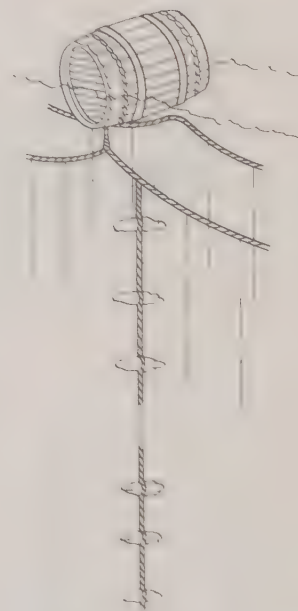


22. Oyster Culture

Long line type

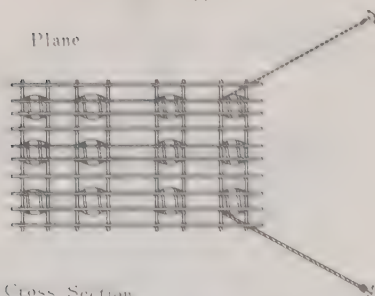


Oyster Collector

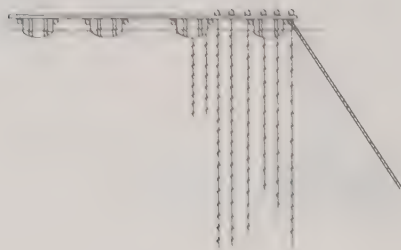


Raft hanging type

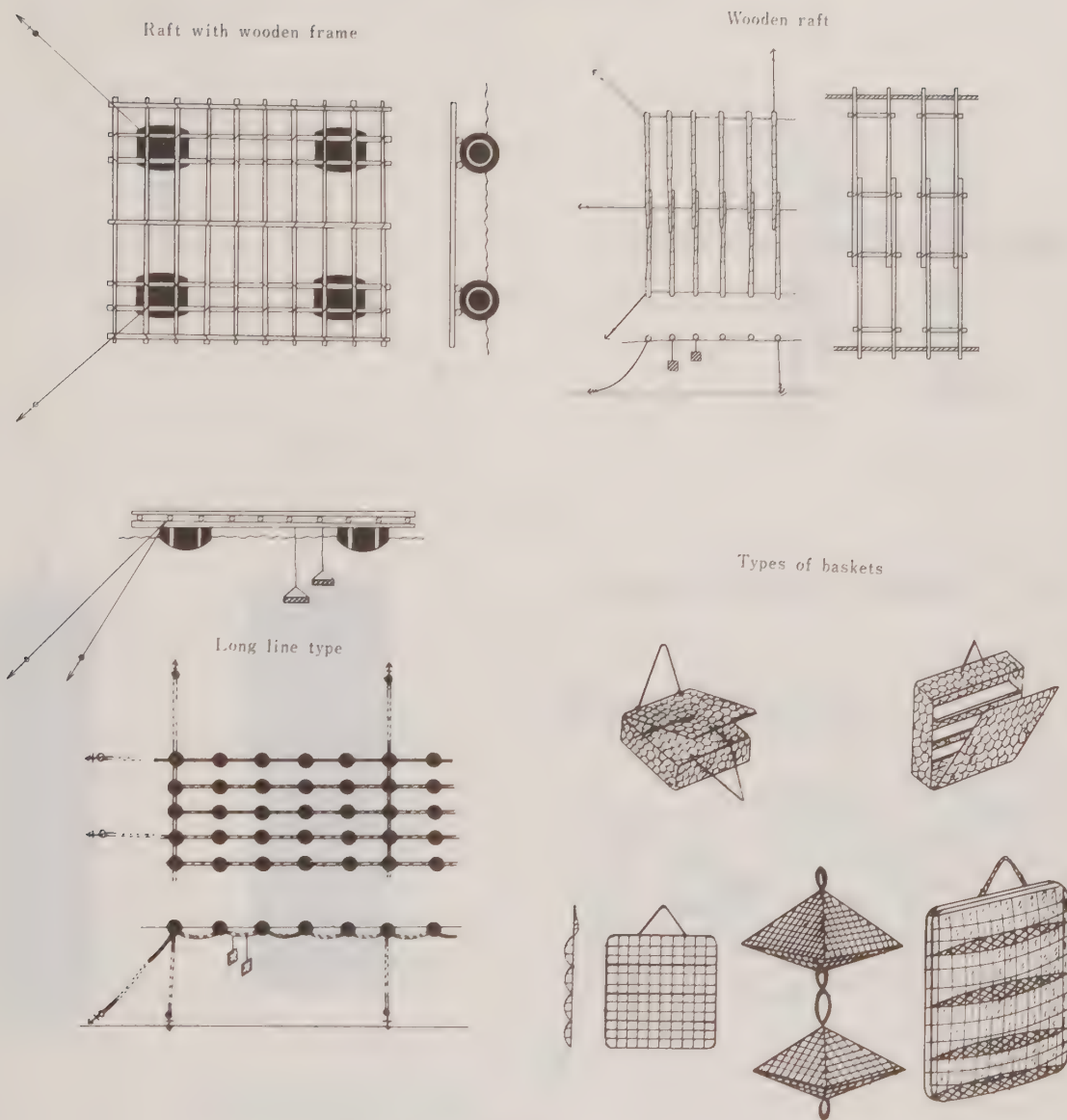
Plane



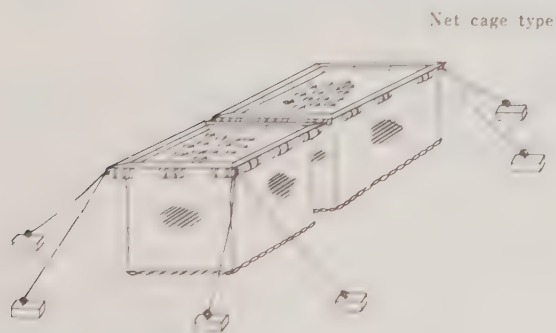
Cross Section



23. Pearl Culture

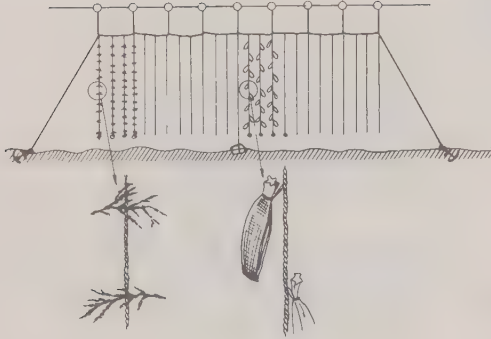


24. Yellowtail Culture

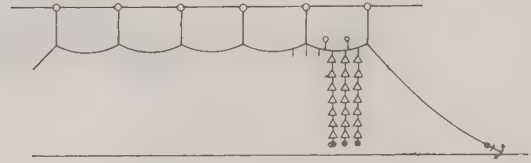


25. Scallop Culture

Seed collector

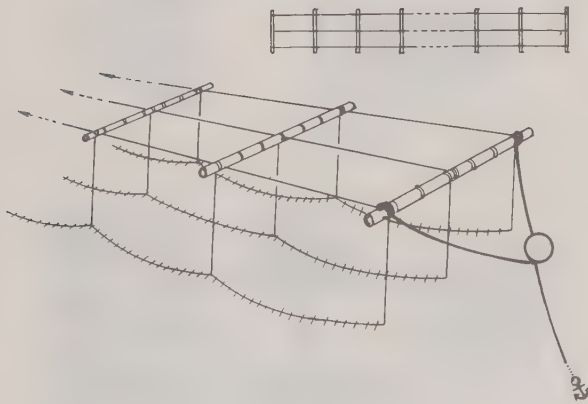


Long line type

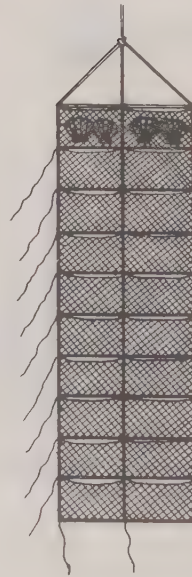


26. "Wakame" Seaweed Culture

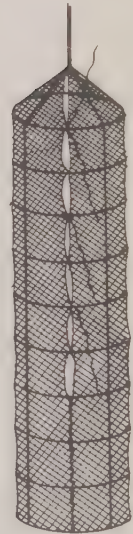
Raft type



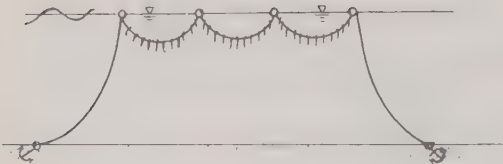
Pocket net type



Basket type



Long line type



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